



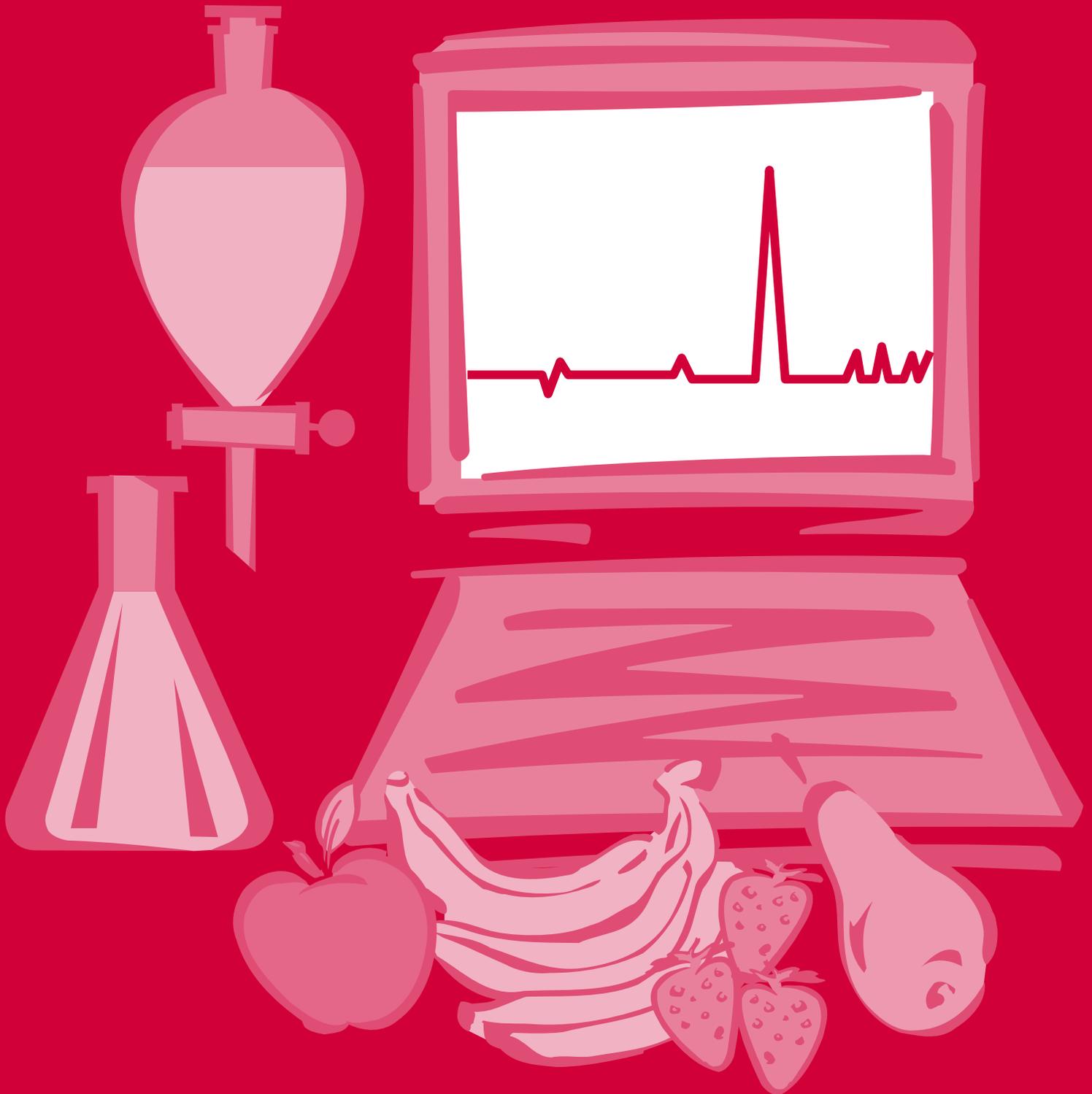
United States
Department of
Agriculture

Agricultural
Marketing
Service

Science and
Technology

Pesticide Data Program

Annual Summary Calendar Year 2000



Contents

Page No.

<i>Preface</i>	vii
<i>Executive Summary</i>	xi
<u>Section I Introduction</u>	1
<u>Section II Sampling Operations</u>	4
Background.....	4
Fresh/Processed Fruit and Vegetables.....	5
Peach Single Serving Survey.....	5
Peanut Butter.....	8
Rice.....	8
Poultry.....	8
<u>Section III Laboratory Operations</u>	9
Overview.....	9
Fresh/Processed Fruit and Vegetables.....	9
Peach Single Serving Survey.....	10
Peanut Butter.....	10
Rice.....	10
Poultry.....	10
Quality Assurance Program.....	11
<u>Section IV Database Management</u>	11
Electronic Data Life-Cycle.....	11
Data Reporting.....	13
<u>Section V Sample Results and Discussion</u>	13
Sample Results.....	13
National Estimates.....	13
Fresh vs. Processed.....	15
Postharvest Applications.....	15
Environmental Contaminants.....	17
Single/Selective Residue Analyses.....	17
Multiple Residue Detections.....	17
Import vs. Domestic Residue Comparisons.....	17
Tolerance Violations.....	18
Synopsis.....	19

Figures and Tables.....

Figures

Page No.

1	Overview of PDP Management and Operations	2
2	Participating States and Their Geographical Distribution Areas	3
3	Commodity Origin	7
4	Distribution of 480 Poultry Liver Samples.....	9
5	PDP Data Life Cycle	12

Tables

1	Samples Collected and Analyzed per Commodity by Each Participating State.....	6
2	Number of Samples and Residues Detected, by Commodity	14
3	Selected Residue Comparisons, Fresh vs. Processed	16

Appendices A-M

Appendix A	Commodity History
Appendix B	Sample Origin by State or Country
Appendix C	Quality Assurance Program Elements
Appendix D	Import vs. Domestic Pesticide Residue Comparisons
Appendix E	Distribution of Residues by Pesticide in Fruit and Vegetables
Appendix F	Distribution of Residues for Peach Single Serving Survey
Appendix G	Distribution of Residues by Pesticide in Peanut Butter
Appendix H	Distribution of Residues by Pesticide in Rice
Appendix I	Distribution of Residues by Pesticide in Poultry
Appendix J	National Estimates for Concentration Percentiles vs. Tolerance
Appendix K	Cumulative Distributions of Residues for Selected Pesticide/Commodity Pairs
Appendix L	Number of Residues Detected per Sample
Appendix M	Samples Reported to FDA as Exceeding the Tolerance or Without Established Tolerance

Acronyms

AMS	Agricultural Marketing Service
APHIS	Animal and Plant Health Inspection Service
ARS	Agricultural Research Service
CARAT	Committee to Advise on Reassessment and Transition
CDFA	California Department of Food and Agriculture
CFR	Code of Federal Regulations
CV	Coefficient of Variation
EMRL	Extraneous Maximum Residue Limit
EPA	Environmental Protection Agency
ERS	Economic Research Service
FAS	Foreign Agricultural Service
FDA	Food and Drug Administration
FQPA	Food Quality Protection Act
FSIS	Food Safety and Inspection Service
GIPSA	Grain Inspection, Packers & Stockyards Administration
GLP	Good Laboratory Practice
JMPR	Joint Meeting on Pesticide Residues
LIB	Laboratory Information Bulletin
LOD	Limit of Detection
LOQ	Limit of Quantitation
MRM	Multiresidue Method
MRL	Maximum Residue Limit
NAS	National Academy of Sciences
NASS	National Agricultural Statistics Service
OPMP	Office of Pest Management Policy
PDP	Pesticide Data Program
QA/QC	Quality Assurance/Quality Control
QAO	Quality Assurance Officer
QAU	Quality Assurance Unit
SOP	Standard Operating Procedure
SRM	Selective Residue Method
RDE	Remote Data Entry
TRAC	Tolerance Reassessment Advisory Committee
USDA	United States Department of Agriculture

Preface

In 1991, the United States Department of Agriculture (USDA) was charged with implementing a program to collect data on pesticide residues in food. The USDA Agricultural Marketing Service (AMS) was appointed to undertake the creation and implementation of such a program, currently known as the Pesticide Data Program (PDP). PDP has been in operation since May 1991 and has published its findings annually since 1991.

PDP planning and policy are formulated with the support of various USDA agencies and the Environmental Protection Agency (EPA). Agencies from USDA include: AMS, the National Agricultural Statistics Service (NASS), the Economic Research Service (ERS), the Agricultural Research Service (ARS), and the Office of Pest Management Policy (OPMP).

PDP's data on pesticides in selected commodities strengthen the Government's ability to respond to food safety and marketing concerns, to protect public health, and to provide EPA with data needed to implement the Food Quality Protection Act (FQPA) enacted by the U.S. Congress in August 1996. Title III Sec. 301© of FQPA states: *"The Secretary of Agriculture shall ensure that the residue data collection activities conducted by the Department of Agriculture in cooperation with the Environmental Protection Agency and the Department of Health and Human Services, provide for the improved data collection of pesticide residues, including guidelines for the use of comparable analytical and standardized reporting methods and increased sampling of foods most likely consumed by infants and children."* PDP has been actively involved on behalf of the Department in the implementation of FQPA and has participated in various public forums sponsored by the Tolerance Reassessment Advisory Committee (TRAC) and its successor, the Committee to Advise on Reassessment and Transition (CARAT). Information obtained at these forums allowed for careful planning of program activities and projection of future data needs.

In estimating the potential risks of pesticide residues in food, EPA uses a step-wise approach

that ensures pesticides are examined as closely as necessary to understand their risks, but minimizes the Agency's resource expenditures. As an initial assessment, EPA assumes that all acres of all crops are treated with all pesticides for which there is an approved use. EPA also assumes that residues in treated crops are present at the maximum allowed level. While such an assessment is easy and quick to generate, risk estimates based on these worst case assumptions may significantly exceed the actual risk from pesticide residues in the food supply. Therefore, if the initial (worst case) assessment indicates potential risks that would be of concern, EPA refines its assessment using available, reliable data. These refinements may include using data on the percent of a crop treated with a pesticide; studies of the effects of washing, cooking, processing, and storage; and residue monitoring data. This is when PDP data can be pivotal. PDP's sampling procedures were designed to capture actual residues in the food supply as close as possible to the time of consumption. The data generated by PDP are more realistic than the assumptions used in EPA's initial risk assessments and are useful in refining dietary risks.

PDP operations are guided by recommendations presented to the U.S. Congress by the National Academy of Sciences (NAS) in the *"Pesticides in the Diets of Infants and Children"* (National Research Council, National Academy Press, Washington, DC, 1993). In that report, the Academy examined scientific and policy issues that government agencies need to address when regulating pesticide residues in foods and recommended a new approach for assessing pesticide risks for infants and children. The approach requires availability of better information on food consumption patterns of infants and children, pesticide residue data on foods most consumed by infants and children, and toxicity data that specifically address vulnerability of this population group. PDP concentrates its efforts in providing better pesticide residue data on foods most consumed by children.

In 2000, PDP conducted a special study on single servings of peaches to supplement similar studies in apples and pears conducted in 1999. The 2000 data also covers more metabolites and degradates

in screening profiles and additional raw and processed foods listed as most consumed by children.

The States participating in PDP deserve special recognition for their contributions to the program. Sample collectors' vigilance and dedication allow AMS to adjust sampling protocols to respond to changing trends in commodity distribution and availability. Laboratory staff were helpful in formulating recommendations to increase productivity and improve analytical methods. PDP thanks NASS for providing statistical support; The Food Safety and Inspection Service (FSIS) for providing sample collection services for poultry; the AMS Eastern Laboratory, the Animal and Plant Health Inspection Service (APHIS) Laboratory, and the Grain Inspection, Packers and Stockyards Administration (GIPSA) Laboratory for providing testing services to the program. PDP also acknowledges the exceptional support of EPA's Office of Pesticide Programs, Health Effects Division staff for their contributions in refining the 2000 Program Plan.

We welcome any comments on the Summary's presentation. A form for submitting comments is provided at the end of the Summary.

Data presented in this Summary were collected and processed through the efforts of the following:

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Executive Summary

The Pesticide Data Program (PDP) was implemented by USDA in May 1991 to collect data on pesticide residues in foods. The data are released annually on a calendar year basis in the form of summaries and through the Internet. This publication summarizes PDP results for 2000.

PDP data are used by EPA, FDA, ERS, the USDA's Foreign Agricultural Service (FAS), and various groups within the private sector. EPA uses PDP data to refine estimates of dietary exposure as part of the pesticide reregistration process under FQPA. PDP data are also used by the government and agricultural community to examine residue issues which may affect agricultural practices and U.S. trade. Recent uses of PDP data include targeting crops that need pesticide alternatives, promoting export of U.S. commodities in a competitive global market, and addressing food safety concerns.

Program operations were carried out with the support of 10 states: California, Florida, Michigan, New York, Ohio, Texas, and Washington for collection and analysis of samples, and Colorado, Maryland, and Wisconsin for sample collection only (samples are shipped to other State and Federal laboratories for analysis). Federal laboratories providing testing services include the GIPSA Laboratory, the AMS Eastern Laboratory, and the APHIS National Monitoring and Residue Analysis Laboratory. The AMS Science and Technology program is responsible for PDP day-to-day administrative, sampling, technical, and database activities.

PDP sampling protocol standard operating procedures define the frequency, number of samples, and criteria for selection of sampling sites. This sampling design makes PDP data valuable for dietary exposure assessments. Samples are taken close to the time and point of consumption and sample origin is captured when available. Pesticides and commodities are chosen based on EPA's data needs and USDA's food consumption surveys.

Samples collected by each State are apportioned according to the State's population. The normal monthly sampling rate is 62 samples per

commodity, except for highly seasonal commodities. For seasonal commodities, sampling rates are adjusted to reflect market availability, and sample collection is limited to the season when the commodity is available. This adjusted sampling rate ranges from half to triple the normal sampling rate. Samples are randomly chosen without regard for commodity origin and reflect what is typically available to the consumer throughout the year. PDP's sampling site selection criteria takes into account the different volumes of product distributed annually from each sampling site.

In 2000, in addition to routine operations, PDP conducted a poultry survey and a peach single serving survey. For the poultry survey, PDP engaged the support of the USDA FSIS. More than 1,100 poultry samples consisting of muscle, adipose, and liver tissues were collected at major production plants throughout the United States. For the peach survey, sample preparation and testing were modified to provide data for acute exposure assessment. Sample collection occurred during the 9 months of the year when peaches are available, which included domestic and imported products. PDP analyzed 534 individual peaches and 536 composite samples.

PDP tested fresh and processed fruit and vegetables, peanut butter, poultry, and rice for various insecticides, herbicides, fungicides, and growth regulators. Commodities sampled in 2000 were apples, cantaloupes, carrots, cherries, cucumbers, grapes, green beans, lettuce, nectarines, oranges, peaches (single servings and composites), peanut butter, pears (canned), pineapples, potatoes, rice, strawberries, (fresh and frozen), sweet bell peppers, tomatoes (canned), and poultry.

PDP collected and analyzed a total of 10,907 samples in 2000: 8,912 fruit and vegetables, 178 rice, 716 peanut butter, and 1,101 poultry tissues (476 adipose, 480 liver, and 145 muscle) samples. Samples originated from 38 States and 21 foreign countries. Approximately 80 percent of all samples were domestic, 19 percent were imported, and less than 1 percent of unknown origin. Cantaloupes, cucumbers, grapes, green beans, peaches, and sweet bell peppers accounted for most of the imports. All cherries in the program were domestic

produce. Overall, approximately 42 percent of all samples contained no detectable residues, 22 percent contained 1 residue, and 35 percent contained more than 1 residue. Less residues were detected in poultry, processed products, and grains than in fresh commodities: 97 percent of poultry tissues, 93 percent of canned pears, 89 percent of canned tomatoes, 74 percent of peanut butter, and 67 percent of rice of samples were found to contain no detectable residues. Overall, the range of concentrations detected on individual peaches was similar to that of composite samples. Low levels of environmental contaminants were detected in cantaloupes, carrots, cucumbers, potatoes, and poultry adipose tissues. However, the concentrations detected were below levels that trigger regulatory actions.

Residues exceeding the pesticide tolerance were detected in 0.2 percent of all composite samples testing during 2000. Residues with no tolerance listed in Code of Federal Regulations (CFR), Title 40, Part 180, were found in 1.2 percent of all samples. These residues were detected at low concentrations and may be due to spray drift, crop rotations, or cross contamination at packing facilities. PDP reports these findings to FDA as soon as they are received. A tolerance is the maximum quantity of a pesticide residue allowable on a raw agricultural commodity. Violative residues are defined as residues exceeding the tolerance or residues at levels of regulatory significance for which no tolerance has been established for that particular crop.

PDP laboratories maintain an ongoing verification of limits of detection (LODs) for each compound screened. These data are used by EPA to calculate exposure contributed by samples reported as “non-detects,” or not containing a residue above a stated LOD.

PDP continuously strives to improve methods for the collection, testing, and reporting of data. PDP data are available to EPA and other Federal and State agencies charged with regulating and setting policies on the use of pesticides. Copies of the summary may be obtained by calling the Monitoring Programs Office at (703) 330-2300 or by mailing the form provided at the end of the summary. The summary can also be downloaded from PDP’s web site at <http://www.ams.usda.gov/science/pdp/>.

Pesticide Data Program (PDP)

Annual Summary, Calendar Year 2000

This summary consists of the following sections: (I.) Introduction, (II.) Sampling Operations, (III.) Laboratory Operations, (IV.) Database Management, and (V.) Sample Results and Discussion

I. Introduction

This is the tenth annual summary of the USDA PDP results. The previous summaries of PDP data for calendar years 1991-1999 are posted at www.ams.usda.gov/science/pdp (1993-1999) or are available as hard copies (1991-1999) on request.

PDP pools the expertise available in AMS, NASS, ERS, and ARS to achieve its goals and objectives. NASS provides statistically reliable data on chemical usage at the State level and collects economic input data that link chemical usage with economic characteristics. ERS analyzes AMS and NASS data to understand producer behavior and to determine the impact various production practices, policies, and regulations might have on the Nation's agricultural production, food supply, and consumers. ARS conducts nationwide surveys of food intake by individuals and translates data on foods as consumed into portions of raw agricultural commodities that can be linked with pesticide residue data. AMS, through its Science and Technology program, oversees PDP's policies and planning.

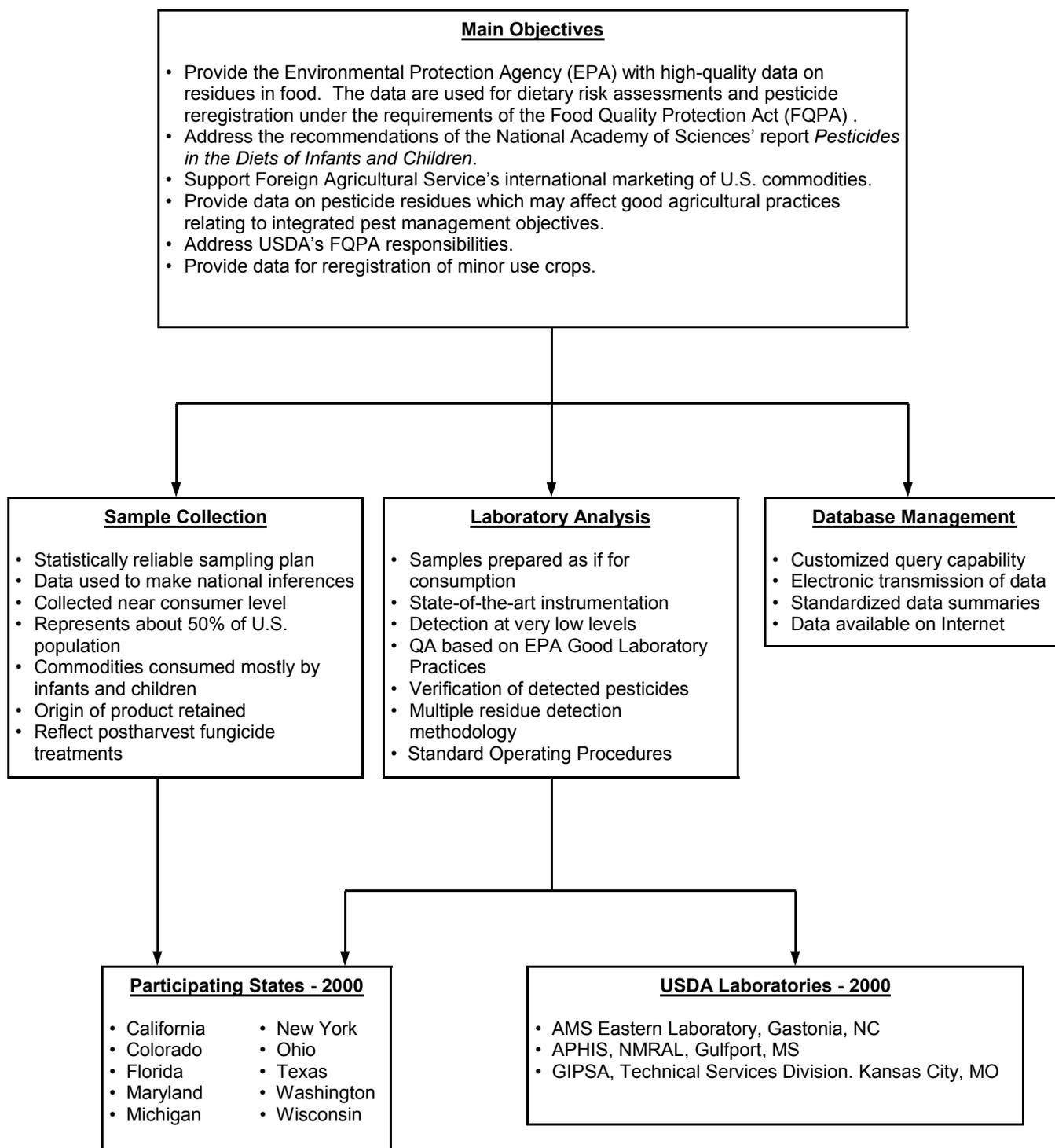
The program's three major components--sample collection, laboratory analysis, and database management--are shown in Figure 1, Overview of PDP Management and Operations. Except for poultry, all 2000 samples were collected by 10 States (California, Colorado, Florida, Maryland, Michigan, New York, Ohio, Texas, Washington, and Wisconsin) through cooperative agreements with their respective agencies. Poultry samples were collected through the USDA's Food Safety and Inspection Service (FSIS). Laboratory services were provided by seven States (California, Florida, Michigan, New York, Ohio, Texas, and Washington) and three Federal laboratories (AMS Eastern Laboratory, GIPSA Technical Services Division, and APHIS National Monitoring and Residue Analysis Laboratory). Sampling, testing, and database daily operations are managed by PDP staff in Manassas, Virginia.

The ten States participating in the program and neighboring States (Alaska, Connecticut, Delaware, Hawaii, Idaho, Massachusetts, Nevada, New Jersey, New Mexico, Vermont, Virginia, and Wyoming) in their direct distribution network are shown in Figure 2. Collectively these States represent about 50 percent of the Nation's population and all four census regions of the United States; they also represent the major producers of fruit and vegetables. The origin of commodities--domestic, imports, and unknown--is shown in Figure 3. The states with major poultry processing plants where samples were collected by FSIS from 167 sites are shown in Figure 4. These sites represent approximately 96 percent of the United States production of young chickens.

AMS works closely with EPA to select the commodities and pesticides to be placed in PDP. Commodities chosen for inclusion are those most often consumed by the American public, with emphasis on those consumed by infants and children. During 2000, 21 commodities (apples, cantaloupe, carrots, cherries, cucumbers, grapes, green beans, lettuce, nectarines, oranges, peaches, canned pears, pineapples, potatoes, fresh strawberries, frozen strawberries, sweet bell peppers, canned tomatoes, peanut butter, poultry, and rice) were sampled and analyzed. Pesticides screened by PDP include compounds for which toxicity data and preliminary estimates of dietary exposure indicate the need for more refined exposure estimates. In 2000, PDP also monitored pesticides for which mitigation measures (e.g., reduced application rates) have been put in place by the EPA. PDP revises its analytes and commodities periodically to address EPA's data needs.

PDP has an important role in the implementation of FQPA. This law, enacted by the United States Congress in 1996, directs the Secretary of Agriculture to collect pesticide residue data on commodities highly consumed by infants and children. PDP data are used by EPA to review the safety of existing tolerances (maximum residue limits) that were in effect when

Figure 1. Overview of PDP Management and Operations



cooperation made it possible to adjust sampling protocols in response to fluctuations in food distribution and production.

Because PDP's main objective is to collect data for risk assessment evaluations, program operations differ markedly from those followed by regulatory monitoring programs for tolerance enforcement. PDP samples are collected close to the point of consumption and are prepared emulating consumer practices. Sampling is based on EPA data needs and does not interfere with commodity distribution. Laboratory operations are geared towards achieving the lowest detectable levels rather than quick sample turn around, and pesticides tested are mainly those with registered uses in the commodity(ies) rather than screening for all potential illegal residues. A chronological history of the commodities in PDP from program inception through 2002 is shown in Appendix A.

II. Sampling Operations

◆ Background

The goal of the PDP fruit and vegetable sampling program is to randomly select samples from the national food distribution system to represent pesticide residues in the United States food supply. To accomplish this goal, PDP uses sampling protocols that are statistically reliable and adheres to Standard Operating Procedures (SOPs) to safeguard sample integrity. Samples are collected by trained inspectors as close to the point of consumption as possible at sites where sample identity is still available. Samples at these locations will reflect any pesticide degradation that occurs during transit and storage. These samples will also have been treated with any postharvest applications of fungicides and growth regulators at this point in the food distribution system. In this manner, these samples will result in data that reflect the consumer's actual pesticide residue exposure.

PDP sampling operations are adjusted according to product availability. For food commodities, the number of samples collected is determined by State population (fruit and vegetables) or commodity production figures (grains). For seasonal commodities, this number is adjusted to one-half, single, double, or triple rates. This adjustment reflects market availability and ensures collection of a

significant number of samples during the short periods the commodity is available. In addition to seasonal availability, some commodities were sampled only part of the calendar year because the commodity had been sampled for the standard time in the program (generally 2 years). For 2000, the commodity sampling schedule was as follows: fresh cantaloupe, canned pears, canned tomatoes collected January-June; fresh peaches and strawberries collected January-September; fresh cherries collected May 15-August 18; nectarines collected July-September; fresh potatoes and pineapples collected July-December; apples, carrots, and rice collected October-December. Sample sizes for all fresh fruit and vegetables are from 3-pounds to 7-pounds. Processed commodities (canned and frozen) are 3-pounds. Rice and peanut butter samples are 1-pound.

SOPs provide criteria for site selection and specific instructions for sample selection, shipping and handling, and chain-of-custody. These SOPs are updated as needed and serve as a technical reference in conducting program sampling reviews to ensure that program goals and objectives are met.

Sample Information Forms are used to document information required for chain-of-custody of PDP samples. Sample collectors record information such as the: (1) State of sample collection; (2) collection date; (3) sampling site (four-digit code); (4) commodity code; and (5) testing laboratory code. These five pieces of information are combined to form a unique sample identification number, which is used for recording in the PDP database. Any additional pertinent information related to sampling can also be recorded, such as whether the sample is domestic or imported (including the country of origin). The forms are also used to keep track of any samples that are not collected, lost in transit, or damaged and unsuitable for analysis when received at the laboratory.

Statistical support for all sampling operations is provided by USDA NASS. Close correlations are found between PDP sample origin data and independent estimates of commodity production figures by the States. This correlation is also found in a comparison of PDP import data with that from independent sources. Consequently, data collected under this sampling approach can be considered representative of actual pesticide residues in the United States food supply.

In 2000, PDP modified its program operations to have laboratories specialize in a few commodities rather than analyze all of the PDP commodities from their region. Therefore, with the exception of California, all samples of a commodity collected for PDP throughout the nation are sent to a single laboratory. This arrangement created larger sample sets, increased laboratory productivity and efficiency, reduced quality control costs, and reduced loss of samples.

◆ **Fresh/Processed Fruit and Vegetables**

Fruit and vegetables, including fresh and processed products, comprised about 80 percent of all samples collected. Fresh commodities collected in 2000 were apples, cantaloupes, carrots, cherries, cucumbers, grapes, green beans, lettuce, nectarines, oranges, peaches, pineapples, potatoes, strawberries, and sweet bell peppers. Processed commodities were canned pears, frozen strawberries, peanut butter, rice, and canned tomatoes. Samples were collected at either terminal markets or large chain store distribution centers. Participating State agencies were responsible for compiling and maintaining lists of sampling sites. After establishing their site lists, States were required to provide AMS and NASS with annual volume information for each site (quantity of commodity distributed in 1 year). This information is used to weight the site to determine the probability for selection. For example, a weight of 10 may be given to a site that distributes 100,000 pounds of produce annually and a weight of 1 may be given to a site that distributes 10,000 pounds of produce. The probability-proportionate-to-size method of site selection then results in the larger site (distributing 100,000 pounds) being 10 times more likely to be selected for sampling than the smaller site (distributing 10,000 pounds). Participating States are required to work with NASS to develop their statistical procedures for site weighting and selection. States are also given the option of having NASS perform their quarterly site selection for them. The number of sampling sites and the volume of produce distributed by the sites vary greatly between States. Sampling plans that included sampling dates, sites (primary and alternate), targeted commodities, and testing laboratories were prepared by States on a quarterly basis (3-month period). Collection of commodities was randomly assigned to weeks of the month, prior to selecting specific sampling dates within the week. Because sampling sites were selected for the entire quarter, States were allowed to

assign the sites to particular months based on geographic location.

State population figures were used to assign the number of fruit and vegetable samples scheduled for collection each month. These population-based numbers were as follows: California-14; Colorado-2; Florida-7; Maryland-4; Michigan-6; New York-9; Ohio-6; Texas-8; Washington-4; and Wisconsin-2. This schedule results in a monthly target of 62 samples per commodity (or 744 samples of each commodity per year). In addition to routine collection targets, an adjusted sample collection framework (weighted sampling scheme) was used to compensate for the seasonality of selected commodities. Under this weighted scheme, cantaloupe samples were collected at one-half, single, and double the routine monthly rate to reflect market availability. A similar approach was used for processed commodities, where the ratio of fresh/frozen and juice concentrate/ready-to-serve samples was adjusted to reflect consumption figures. The resulting data are expected to more accurately mirror changes in United States consumption patterns based on commodity availability.

A total of 8,912 fresh and frozen fruit and vegetable samples were collected and analyzed during 2000 (see Table 1 for the number of samples collected per State). Figure 3 shows the total number of samples per commodity and the percentage of each that were either domestic, imported, mixed national, or of unknown origin. Appendix B provides a more detailed breakdown of sample origin by State or country. Fruit and vegetable samples originated from 38 States and 21 foreign countries.

◆ **Peach Single Serving Survey**

Samples for the survey on single servings of peaches were collected using the fruit and vegetable sampling frame and followed routine collection procedures. Five-pound samples were collected from randomly selected pallets at the sites, bagged, and sent to the laboratory for analysis. On receipt, one peach from each 5-pound sample was chosen for the single serving analysis. The remaining sample was tested as a composite. Data from this survey can be used in probabilistic analysis to estimate acute (short-term) risk to pesticides resulting from a single eating occasion. A total of 534 single serving peach samples were analyzed for 100 pesticides plus 38 corresponding metabolite, degradates, and isomers.

Table 1. Samples Collected and Analyzed per Commodity by Each Participating State

Fresh Fruit and Vegetables

STATE	AP	CH	CN	CR	CU	CX	GB	GR	LT	NE	OG	PC	PN	PO	PP	ST	Total Fresh
California	40	61	92	42	167	113	161	165	168	73	167	114	80	82	167	97	1,789
Colorado	6	11	13	6	24	21	23	24	23	12	24	21	12	12	24	18	274
Florida	21	34	47	21	84	63	82	84	84	38	85	63	42	42	84	60	934
Maryland	12	15	28	12	44	35	48	48	48	23	48	35	24	24	44	34	522
Michigan	18	29	39	18	72	50	69	72	72	34	72	50	36	35	71	53	790
New York	27	38	60	26	108	93	108	108	108	54	108	93	54	54	108	81	1,228
Ohio	18	25	40	17	72	45	72	72	72	33	72	45	36	36	72	54	781
Texas	24	35	51	24	95	69	89	96	94	45	97	70	45	48	96	68	1,046
Washington	12	18	28	12	48	31	46	48	48	23	48	31	24	24	48	35	524
Wisconsin	6	9	12	6	23	14	22	24	23	11	23	14	11	12	24	18	252
TOTAL	184	275	410	184	737	534	720	741	740	346	744	536	364	369	738	518	8,140

Processed F&V

Nut Product

Grain Product

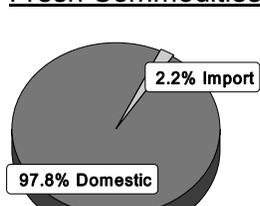
STATE	Processed F&V			Total Processed	Total F&V	Nut Product		Grain Product	
	CP	SZ	TC			PB	RI		
California	83	28	83	194	1,983	160	38		
Colorado	12	--	12	24	298	24	6		
Florida	40	3	42	85	1,019	73	21		
Maryland	23	2	24	49	571	46	11		
Michigan	36	1	36	73	863	72	16		
New York	54	--	54	108	1,336	108	27		
Ohio	36	--	36	72	853	66	18		
Texas	48	3	48	99	1,145	95	24		
Washington	23	--	22	45	569	47	11		
Wisconsin	11	--	12	23	275	25	6		
TOTAL	366	37	369	772	8,912	716	178		

Commodities

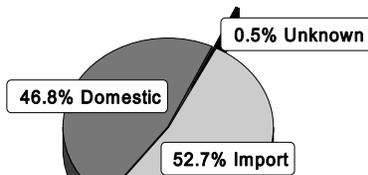
AP - Apples	GB - Green Beans	PN - Pineapples
CH - Cherries	GR - Grapes	PO - Potatoes
CN - Cantaloupe	LT - Lettuce	PP - Sweet Bell Peppers
CR - Carrots	NE - Nectarines	RI - Rice
CP - Pears (Canned)	OG - Oranges	ST - Strawberries (Fresh)
CU - Cucumbers	PC - Peaches, composite	SZ - Strawberries (Frozen)
CX - Peaches, single-serving	PB - Peanut Butter	TC - Tomatoes (Canned)

Figure 3. Commodity Origin

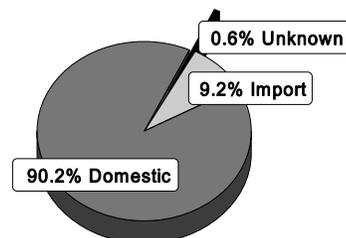
A. Fresh Commodities



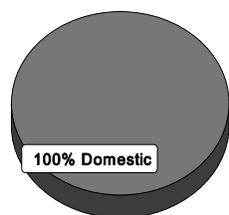
Apples
(184 Samples)



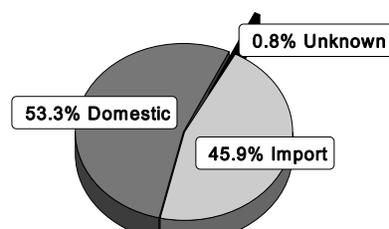
Cantaloupe
(410 Samples)



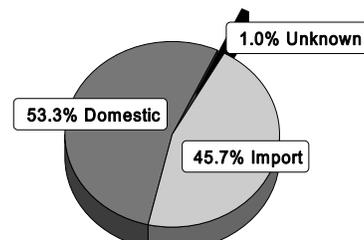
Carrots
(184 Samples)



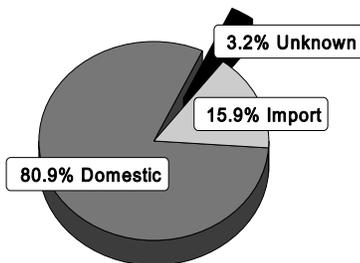
Cherries
(275 Samples)



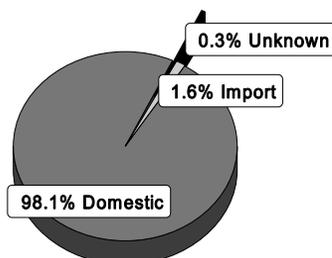
Cucumbers
(737 Samples)



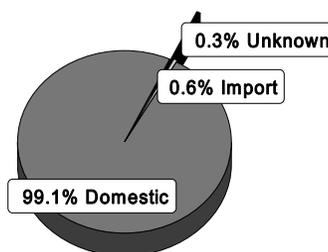
Grapes
(741 Samples)



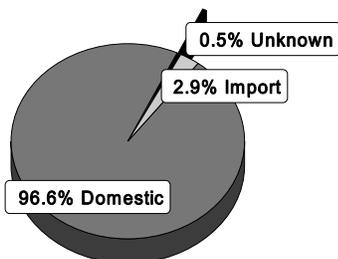
Green Beans
(720 Samples)



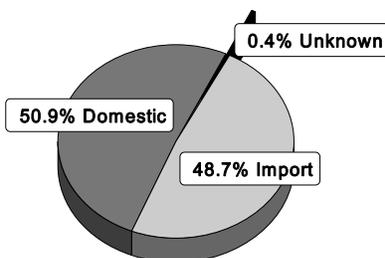
Lettuce
(740 Samples)



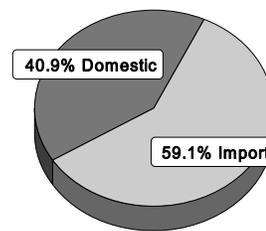
Nectarines
(346 Samples)



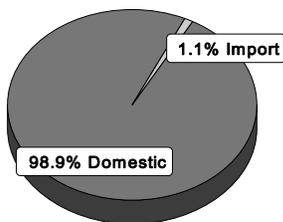
Oranges
(744 Samples)



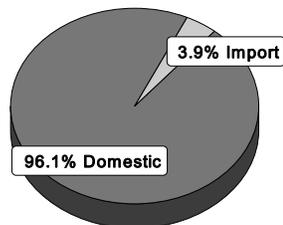
Peaches, Composite
(536 Samples)



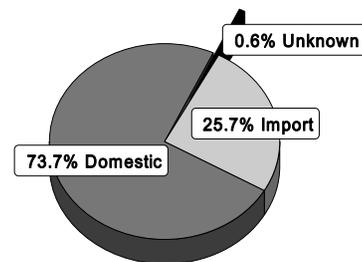
Pineapples
(364 Samples)



Potatoes
(369 Samples)

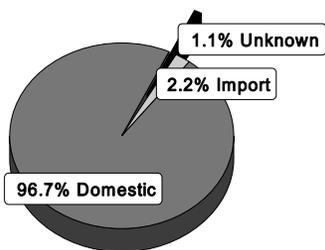


Strawberries, Fresh
(518 Samples)

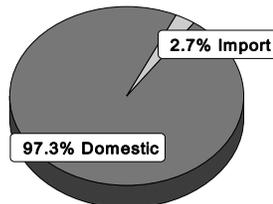


Sweet Bell Peppers
(738 Samples)

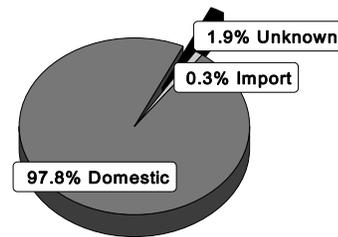
B. Processed Commodities



Pears, Canned
(366 Samples)



Strawberries, Frozen
(37 Samples)



Tomatoes, Canned
(369 Samples)

◆ Peanut Butter

PDP collected and analyzed 716 peanut butter samples. Samples were collected from routine PDP sampling sites, which include major distribution centers and terminal markets. Analysis was performed by the GIPSA Technical Services Division laboratory located in Kansas City, Missouri. Only “creamy style” peanut butter samples containing no less than 90 percent peanuts were collected. Styles such as chunky, old fashioned, and jelly mixes were excluded.

◆ Rice

PDP collected 178 rice samples (enriched milled rice). Samples were collected from routine PDP sampling sites, which include major distribution centers and terminal markets. Analysis was performed by the GIPSA Technical Services Division laboratory located in Kansas City, Missouri. Results are shown in Appendix H.

◆ Poultry

In FY 2000, PDP received funding to initiate a residue testing program for poultry. The objective is to provide the data required by EPA to make

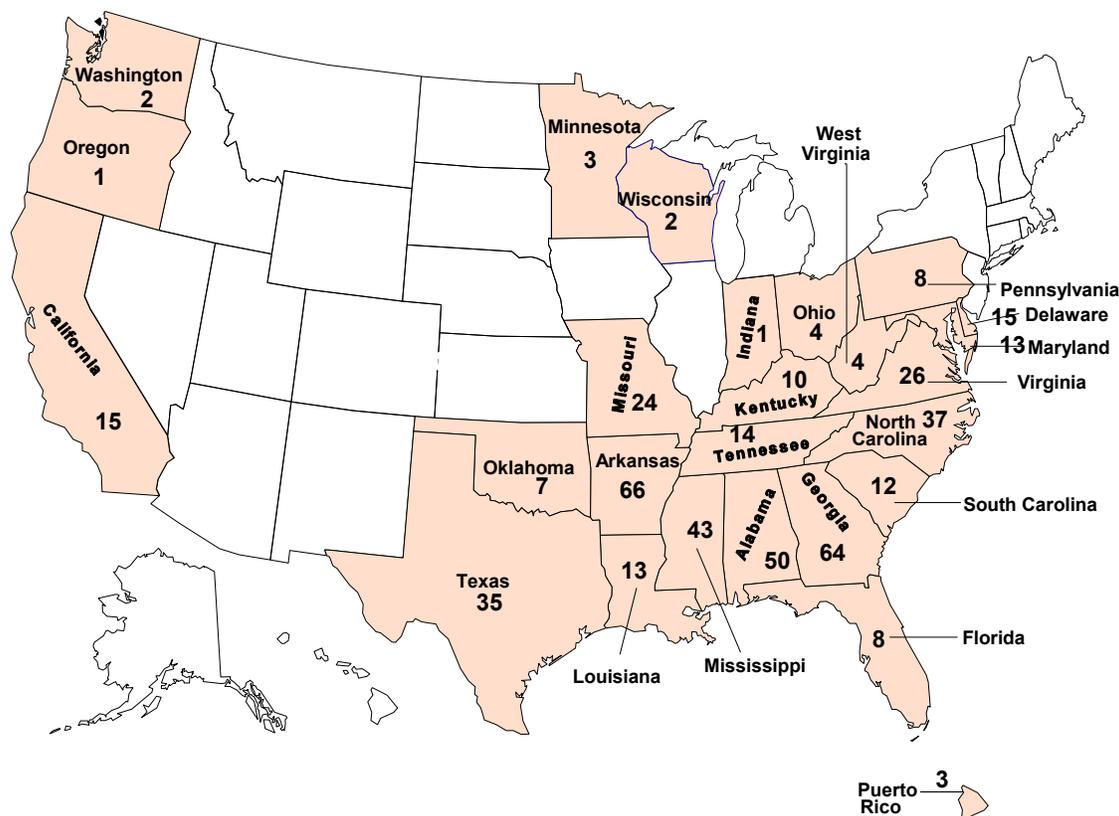
informed decisions on dietary risk exposures to pesticide residues resulting from the consumption of poultry products. Residues may result from pesticides applied directly to livestock, to crops or crop parts used for feed, or when livestock premises are treated.

Sample collection activities are performed by USDA FSIS personnel located in Federally inspected slaughter facilities throughout the United States. FSIS shipped the samples to the AMS Eastern Laboratory, Gastonia, North Carolina, for multiresidue analysis. Each sample consisted of adipose, liver, and muscle tissues. A minimum of 1-pound per tissue was required.

FSIS provided AMS with a list of sites and production volume data. As with the PDP fresh fruit and vegetable site selection protocol, the annual volume data was used to weight the site to determine the probability of selection. Consequently, larger producing sites were sampled more frequently throughout the duration of the survey.

In total, 476 adipose tissues, 480 liver tissues, and 145 muscle tissues were collected and analyzed. FSIS collected samples from 167 Federally inspected poultry slaughter facilities. Figure 4 shows the origin of the 480 liver tissue samples.

Figure 4. Distribution of 480 Poultry Liver Samples



III. Laboratory Operations

◆ Overview

Eleven laboratories (8 State and 3 Federal) performed analyses for PDP during 2000. These laboratories are equipped with instrumentation capable of detecting residues at very low levels. The laboratory staff receive intensive training and must demonstrate analytical proficiency on an ongoing basis. Program scientists continuously test new technologies and develop new techniques to improve the levels of detection. Major changes in methodology are evaluated and their soundness demonstrated and documented in accordance with PDP SOPs.

◆ Fresh/Processed Fruit and Vegetables

PDP laboratories monitored 134 pesticides plus 48 metabolites, degradates, and isomers in fruit and vegetables using multiresidue methods (MRMs) and 2 pesticides by single or selective residue methods (SRMs). On arrival at the testing facility, samples are visually examined for acceptability and discarded

if determined to be inedible (decayed, extensively bruised, or spoiled). Accepted samples are then prepared emulating the practices of the average consumer to more closely represent actual exposure to residues. Fresh samples are prepared as follows: (1) apples are washed with stems and cores removed; (2) cantaloupes are cut in half and seeds and rinds removed; (3) carrots are washed with stem cap portions removed; (4) cucumbers, lettuce, and potatoes are washed with inedibles removed; (5) grapes, green beans, and strawberries are washed with stems and leaves removed; (6) cherries, nectarines, and peaches are washed, stems and leaves removed, and pitted; (7) oranges are peeled; (8) pineapples are washed with tops, cores, and shells removed; and (9) sweet bell peppers are washed with stems, cores, and seeds removed. For processed fruit and vegetables, canned and frozen products are homogenized with their entire contents, including any liquid present. Laboratories are permitted to refrigerate fresh incoming fruit and vegetable samples of the same commodity for up to 72 hours to allow for different sample arrival times from collection sites. Frozen and canned commodities can

be held in storage (freezer or shelf) until the entire sample set is ready for analysis.

Samples are homogenized using choppers and/or blenders and separated into analytical portions (aliquots) for analysis. If testing cannot be performed immediately, the entire analytical set is frozen at -40°C, or lower, according to PDP's Quality Assurance/Quality Control (QA/QC) requirements. Surplus aliquots, not used for the initial testing, are retained frozen in the event that replication of analysis or verification testing is required.

For analysis of fruit and vegetables, variations and combinations of the FDA Luke I (Section 302 of PAM I) and Luke II (FDA's Laboratory Information Bulletin 3896) extraction procedures are used by PDP laboratories in Michigan, New York, Ohio, and Texas. California, Florida, and Washington use modifications of the MRM developed by the California Department of Food and Agriculture (CDFA). All MRMs were determined, through method validation procedures, to produce equivalent data for PDP analytical purposes. Residues are extracted from samples with the use of organic solvents followed by various cleanup procedures. SRMs, when used for detecting benomyl and formetanate, were independently validated by the laboratory performing the analysis.

Various types of chromatography are used for the initial identification and quantitation of pesticides. All residues initially identified must be verified. Verification is accomplished by various forms of mass spectrometry or alternate detection systems, depending on the concentration reported. LODs for various selective detectors are generally lower than those achieved by mass spectrometry. Verification is deemed necessary due to the complexity of commodity matrices and the low concentration levels of detected residues. The verification process provides an extra measure of confidence in the identification of both the pesticide residue and its concentration.

◆ **Peach Single Serving Survey**

The New York State laboratory analyzed single serving and composite peach samples for 100 pesticides plus 38 corresponding metabolites, degradates, and isomers. On receipt of composite peach samples for multiresidue analysis, an individual peach was randomly selected from each 5-pound sample, prepared, and analyzed according to PDP procedures. Single serving samples were extracted using established multiresidue

procedures and analysis for identified compounds was performed utilizing tandem mass spectrometry, selective detectors, or post-column derivatization, high-performance liquid chromatography detection systems. Verification was accomplished by various forms of mass spectrometry or by alternate detection systems, depending on the concentration reported.

◆ **Peanut Butter**

The USDA Kansas City, Missouri, GIPSA laboratory monitored peanut butter samples for 43 pesticides with established tolerances in peanuts plus 13 metabolites and isomers. On arrival at the testing facility, samples were visually examined for acceptability and discarded if leaking, spoiled, or otherwise inedible. Peanut butter samples were refrigerated at 10°C, or lower, until time of analysis. Surplus sample aliquots, not used for the initial testing, were retained refrigerated in the event that replication of analysis or verification testing was required. Extraction of peanut butter samples was accomplished using supercritical fluid extraction (a solventless system) coupled with mass spectrometry detection or post-column derivatization, high-performance liquid chromatography detection systems.

◆ **Rice**

The USDA Kansas City, Missouri, GIPSA laboratory monitored rice samples for 32 pesticides with established tolerances in rice plus 7 metabolites and isomers. On arrival at the testing facility, samples were visually examined for acceptability and discarded if spoiled or otherwise inedible. Rice samples were refrigerated at 10°C, or lower, until homogenization; they were then ground and analyzed. Surplus sample aliquots, not used for the initial testing, were retained refrigerated in the event that replication of analysis or verification testing was required. Extraction of rice samples was accomplished using supercritical fluid extraction coupled with mass spectrometry detection or post-column derivatization, high-performance liquid chromatography detection systems.

◆ **Poultry**

The USDA AMS Eastern Laboratory, Gastonia, North Carolina, monitored poultry adipose, liver, and muscle tissues for 72 pesticides plus 25 metabolites, degradates, and isomers. On arrival at the testing facility, samples were visually examined for acceptability and discarded if warm to the touch, spoiled, or leaking. Poultry tissues were frozen at 0° C, or lower,

until homogenization. Tissues were ground with dry ice, extracted, and cleaned up utilizing gel permeation chromatography. Surplus sample aliquots, not used for the initial testing, were retained frozen in the event that replication of analysis or verification testing was required. Samples were analyzed using mass spectrometry detection, selective detectors, or post-column derivatization, high-performance liquid chromatography detection systems.

◆ **Quality Assurance Program**

The main objectives of the quality assurance/quality control (QA/QC) program are to ensure the reliability of PDP data and the performance equivalency of the participating laboratories. Direction for PDP's QA program is provided through SOPs based on EPA's Good Laboratory Practices (GLPs). A QA Committee, comprised of program Quality Assurance Officers (QAOs), is responsible for annually reviewing program SOPs and addressing QA issues. For day-to-day quality assurance oversight, PDP relies on the Quality Assurance Unit (QAU) at each participating facility. As required under EPA GLPs, the QAU operates independently from the laboratory staff. Preliminary QA/QC review procedures are performed on-site by each laboratory's QAU. Final review procedures are performed by PDP staff who are responsible for collating and reviewing data for conformance with SOPs. Additionally, PDP staff also monitor the participants' performance through proficiency evaluation samples, QAU quarterly internal reviews, and on-site visits. Additional information on the PDP QA program is provided in Appendix C.

IV. Database Management

PDP maintains an electronic database which serves as a central repository for its residue monitoring data. The central database resides at PDP, Monitoring Programs Office, Manassas, Virginia. The data captured and stored in the PDP database include product information, residue findings, and process control recoveries for each sample collected and analyzed along with QA/QC recoveries for each group or set of samples. Each calendar year survey is stored in a separate database structure, allowing for easier administration and reporting of data. The PDP data life-cycle is depicted in Figure 5.

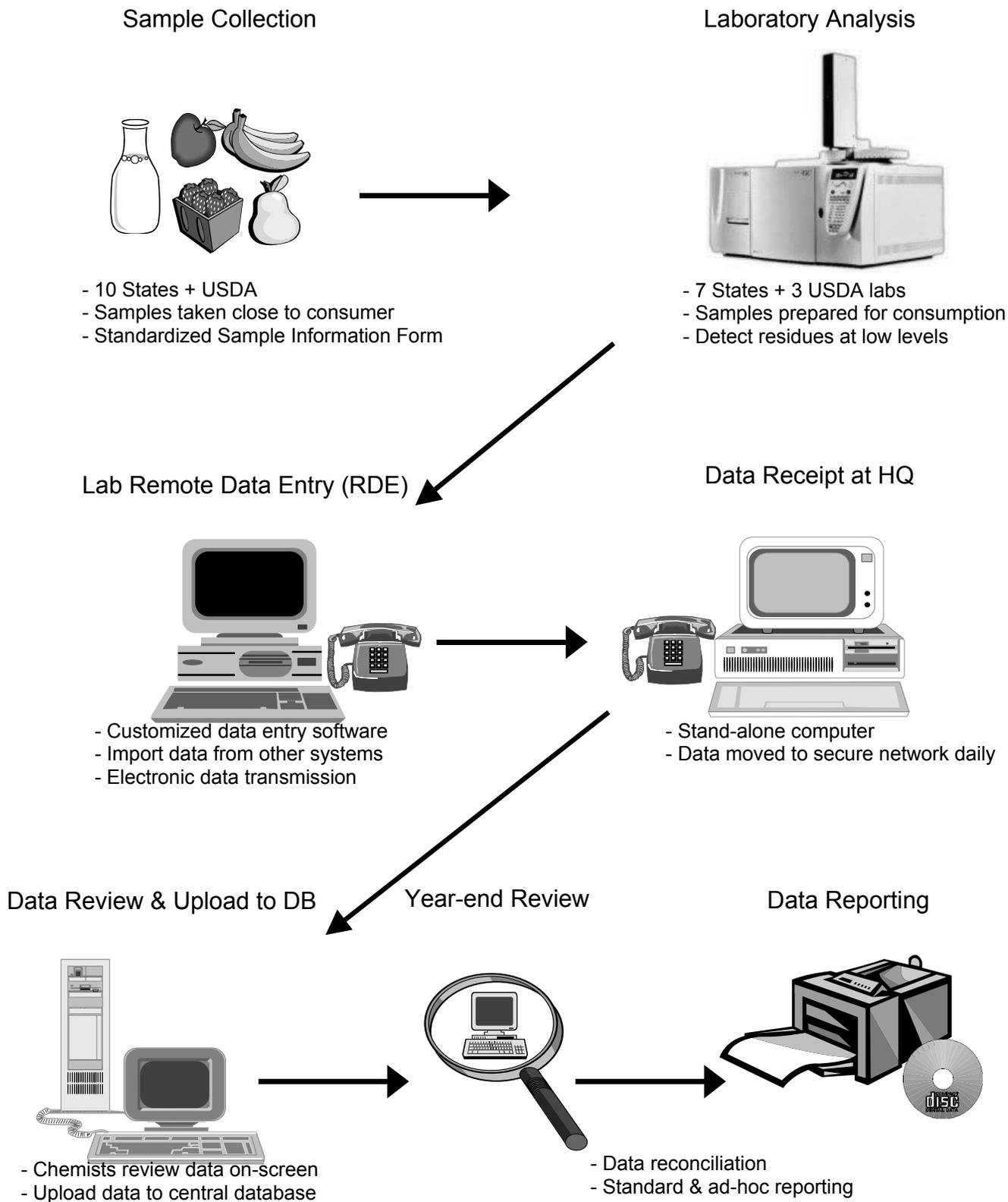
◆ **Electronic Data Life-Cycle**

In 1994, PDP implemented the Remote Data Entry (RDE) system, which is a customized software application. RDE provides interactive data entry screens to participating State and Federal laboratories. The residue monitoring data are then electronically transmitted to PDP headquarters via modem and standard telephone lines. Before the implementation of RDE, all data collected from PDP laboratories arrived in paper format, requiring an exhausting data entry process by PDP headquarters staff.

The RDE data entry screens have extensive edits and cross-checks built in to ensure that valid values are entered for all critical data element fields. This task is made easier by the practice of capturing and storing standardized codes for all critical alphanumeric data elements rather than their complete names, meanings, or descriptions. This coding scheme allows for faster and more accurate data entry, saves disk storage space, and makes it easy to perform ad-hoc queries (data searches) on the database. The data entry screens also perform edits on numeric fields, dates, and other character fields to ensure that entries are within prescribed boundaries.

Several methods of control are employed by the RDE system to protect the security and integrity of the data. At the laboratory, the system includes a check to ensure that a set of data (for 1 commodity for 1 month) has been reviewed and approved for release by a responsible reviewing officer. This greatly reduces the chance of receiving incomplete or invalid data. After one or more data sets are selected for electronic transfer to PDP headquarters, the data for those sets are written to separate files and those files are encrypted (scrambled) as a security measure. Also prior to electronic transfer, a digital signature file is created to accompany each of the data files. The digital signature file captures a "picture" of the data along with a private key code unique to the participating laboratory. After the digital data files are received at PDP headquarters and are moved to a secure network drive, the files are decrypted (unscrambled). The validation of the digital signature attached to the data files ensures that the sender is an authorized participating laboratory and that the data files have not been altered or corrupted, intentionally or otherwise.

Figure 5. PDP Data Life Cycle



At PDP headquarters, the RDE system allows the staff chemists to review the data on-screen and then to mark the data as ready-for-upload to the central PDP database. The upload routine launched from the RDE system converts and passes the data to the PDP database. The database is presently maintained using Microsoft Access in a Windows 2000/NT operating environment. Access to the central PDP database is limited to PDP staff personnel only and is controlled through password protection and user access rights. System back-ups are done each night and back-up tapes are sent to off-site storage once a week.

◆ Data Reporting

The PDP staff receives and responds to requests for data from government agencies and interested outside parties. Ad-hoc queries and custom reports are generated to fill such data requests. An electronic library of data queries is maintained to generate standardized data summaries, including the data tables, charts, and appendices in this annual summary. Subsets of the PDP calendar year databases are made available for download from the PDP web site. The data files on the web site are fixed-length text files that contain a portion of the sampling data, all of the reported residue findings, and reference lists that can be used to interpret the standardized codes used in the PDP data. The data files can be imported into defined database structures and manipulated with the use of most database management software package.

V. Sample Results and Discussion

◆ Sample Results

In 2000, PDP conducted surveys on various foods including fresh and processed fruits and vegetables, peanut butter, rice, and poultry tissues. Of the 10,907 samples collected and analyzed, 8,912 were fruit and vegetable commodities, 716 were peanut butter, 178 were enriched milled rice, and 1,101 were poultry tissues. Approximately 67 percent of the fruit and vegetable samples (domestic and imports) had detectable pesticide residues. Pesticide residues were also detected in 33 percent of the rice samples, 26 percent peanut butter samples, and 3 percent in poultry tissues. Approximately 80 percent of all samples were domestic and 19 percent were imports (less than 1% were of unknown origin). Imports were fruit and vegetable commodities. A comparison of residues for

selected commodities with a significant import component is provided in Appendix D.

Appendix E shows residue findings for fruit and vegetables including tolerance violations, minimum and maximum concentrations detected, LODs, EPA tolerances, and, when applicable, Codex Alimentarius maximum residue limits (MRLs) and extraneous maximum residue limits (EMRLs). Appendix F shows results of the peach single serving survey, including concentrations detected in composite samples and the corresponding single servings for selected samples and pesticides. Appendices G, H, and I depict similar information as Appendix E for peanut butter, rice, and poultry respectively. Table 2 gives an overview of the number of residue detections per commodity class.

The PDP data, as well as other monitoring data, are used to refine estimates of dietary exposure to pesticides. EPA uses all data reported by PDP, including sample results reported as below the LOD. PDP laboratories are required to establish LODs and to report any instrumental response below the LOD as a non-detect. LODs are established experimentally for each pesticide/commodity pair and are reported with each data set. Non-detects can be used in conjunction with percent crop treated data to determine what proportion of these values may be zeroes. Overall, 43 percent of the samples were reported as below the LOD (non-detects) and for samples with residues, most detections were below established tolerances.

◆ National Estimates

As discussed in Section II, the PDP sampling frame incorporates population figures in participating States (representing approximately 50 percent of the Nation's population). There are little or no significant differences in residue estimates across these States and, it can be inferred, across all States. Potentially more critical are differences in the residue content of fresh commodities across months and differences across types of processed commodities (e.g., frozen vs. canned tomatoes). When available, data on the amount of produce moving through wholesale food distributors are used to compute nearly unbiased estimates of pesticide residues in PDP commodities at the National level.

National estimates for selected pesticide/commodity pairs (including metabolites, degradates, and isomers

Table 2. Number of Samples and Residues Detected, by Commodity

	Total Samples Analyzed	Samples with Residues Detected	% of Samples with Residues Detected	Different Residues Detected	Total Residue Detections
<u>Fresh Fruit and Vegetables:</u>					
Apples	184	145	79	22	304
Cantaloupe	410	235	57	18	349
Carrots	184	148	80	21	301
Cherries	275	259	94	28	838
Cucumbers	737	573	78	36	1,486
Grapes	741	511	69	25	1,017
Green Beans	720	496	69	30	1,264
Lettuce	740	275	37	23	468
Nectarines	346	339	98	29	1,043
Oranges	744	593	80	13	779
Peaches, Composite	536	504	94	40	1,864
Peaches, Single-Serving	534	498	93	40	1,740
Pineapples	364	20	5	3	23
Potatoes	369	258	70	18	310
Strawberries, Fresh	518	471	91	25	1,054
Sweet Bell Peppers	738	517	70	46	1,602
TOTAL FRESH	8,140	5,842	72	92	14,442
<u>Processed Fruit and Vegetables:</u>					
Pears, Canned	366	24	7	5	24
Strawberries, Frozen	37	30	81	15	94
Tomatoes, Canned	369	40	11	5	43
TOTAL PROCESSED	772	94	12	38	161
<u>Fruit and Vegetables:</u>					
Number of Samples Analyzed = 8,912					
Number of Samples with Residues Detected = 5,936					
Percent with Residue Detections = 66.6%					
Total Number of Different Residues = 99					
Total Number of Residue Detections = 14,603					
<u>Processed Grain Product:</u>					
Rice	178	58	33	7	68
<u>Processed Nut Product:</u>					
Peanut Butter	716	186	26	9	236
<u>Poultry Tissues:</u>					
Poultry, Adipose	476	29	6	7	34
Poultry, Liver	480	4	1	3	4
Poultry, Muscle	145	2	1	2	2
TOTAL POULTRY	1101	35	3	10	40
<u>All Commodities:</u>					
Number of Samples Analyzed = 10,907					
Number of Samples with Residues Detected = 6,215					
Percent with Residue Detections = 57.0%					
Total Number of Different Residues = 102					
Total Number of Residue Detections = 14,947					

of pesticides) with detectable residues in at least 10 percent of the samples tested are shown in Appendix J. A range of values for the sample mean (average) residue concentration for each pair is provided. The lower value for the range was determined by treating a sample without detectable residues as if it had a residue concentration equal to zero. The upper value for the range was determined by treating such a sample as if it had a residue concentration equal to the LOD. Calculations for the 50th, 75th, and 90th percentiles for each of the pairs are shown. The ratio of the 90th percentile to the tolerance, as a normalization factor, is also provided. These ratios show that, in most cases, the levels of detected residues are a small fraction of the tolerances for the listed pesticide/commodity pairs. Percent detections and percentiles for fresh apples, cantaloupe, carrots, cherries, cucumbers, grapes, green beans, lettuce, nectarines, oranges, peaches, potatoes, strawberries, and sweet bell peppers were weighted to reflect 1998 marketing data. No weighting adjustments were made for peanut butter and rice because marketing data were not available.

The estimated distributions of eight representative pesticide/commodity pairs is displayed in Appendix K. The range of values, the median at the 50th percentile, and the range in percentile representing the lower and upper bound for the sample mean are shown. These pesticide/commodity pairs are carbaryl/cherries, myclobutanil/cherries, endosulfan sulfate/cucumbers, iprodione/grapes, methamidophos/green beans, imazalil/oranges, phosmet/peaches, and captan/strawberries (fresh). In some cases, there is convergence of the upper and lower bound into a single line, because the use of zero or the LOD for non-detected values becomes insignificant. These graphs visually demonstrate that the overwhelming majority of pesticide testing results and the respective means (average values) are at low concentrations.

◆ **Fresh vs. Processed**

The 2000 data show that residue profiles for fresh products are significantly different than for processed products. Various factors may explain these differences in residue profiles. Raw agricultural commodities, if specifically grown for processing, are likely to receive different chemical treatments than fresh market products. Another factor affecting residue concentration or reduction may be a direct result of processing effects such as heat, time, and

product preparation. A comparison of residues for fresh and processed products is shown in Table 3. Data used for this table are the most recent data collected by PDP for the processed product and 2000 data for the corresponding fresh product. Captan was detected in 28 percent of fresh grapes in concentrations ranging from 0.013-0.75 parts per million (ppm), whereas no residues were detected in any of the grape juice samples. Similarly, myclobutanil was reported in fresh grapes at 20 percent, but was not detected in grape juice. In contrast, carbaryl was reported in 41 percent of grape juice samples, a much higher detection rate than the 4 percent detected in fresh grapes. For fresh green beans, endosulfan I, endosulfan II, and endosulfan sulfate were detected at 19, 13, and 27 percent of the samples respectively, whereas no detections were reported in any of the canned or frozen green beans tested. Detection rates for imazalil and thiabendazole in fresh oranges were also significantly higher than in orange juice.

◆ **Postharvest Applications**

Pesticides can be applied before and after harvest depending on the crop and approved label use. PDP data captures both pre- and postharvest uses because samples are collected at points where all pesticide applications have already taken place. Pesticides with postharvest uses are fungicides and selected herbicides (plant growth regulators). According to USDA NASS and ERS surveys (Agricultural Chemical Usage 1999 Field Crops Summary, May 2000; Agricultural Chemical Usage 2000 Field Crops Summary, May 2001; Agricultural Chemical Usage 1998 Vegetable Summary, July 1999; Agricultural Chemical Usage 2000 Vegetable Summary, July 2001; and Agricultural Chemical Usage 1999 Fruit and Nut Summary, July 2000), use of fungicides comprised about 32 percent of total United States pesticide usage on PDP fruit and vegetable crops. However, about 37 percent of PDP detections in fruit and vegetables (fresh and processed) were for residues of fungicides. The inconsistency between usage and residue data may be due largely to fungicides applied after harvest to preserve crops during long term storage. These postharvest applications may result in higher detection rates because environmental factors (such as rainfall, sunlight, temperature, and wind) that promote residue dissipation are not applicable to crops that are in storage. Detections reported by

Table 3. Selected Residue Comparisons, Fresh vs. Processed

Pesticide	GRAPES (2000)			GRAPE JUICE (1999)		
	% of Samples w/ Detections	Minimum Value Detected, ppm	Maximum Value Detected, ppm	% of Samples w/ Detections	Minimum Value Detected, ppm	Maximum Value Detected, ppm
Captan	28.1	0.013	0.75	--	--	--
Carbaryl	3.9	0.013	0.96	40.6	0.003	0.086
Dimethoate	11.9	0.003	0.96	0.4	0.003	0.005
Omethoate	13.9	0.007	0.27	0.3	0.015	0.015
Iprodione	27.9	0.023	1.8	0.4	0.052	0.052
Myclobutanil	20.5	0.030	0.54	--	--	--

Pesticide	GREEN BEANS-Fresh (2000)			GREEN BEANS - Canned/Frozen (1998)		
	% of Samples w/ Detections	Minimum Value Detected, ppm	Maximum Value Detected, ppm	% of Samples w/ Detections	Minimum Value Detected, ppm	Maximum Value Detected, ppm
Acephate	26.7	0.003	1.6	47.7	0.003	0.54
Endosulfan I	19.3	0.008	0.58	--	--	--
Endosulfan II	12.9	0.010	0.50	--	--	--
Endosulfan sulfate	26.5	0.012	0.48	--	--	--
Methamidophos	27.2	0.002	0.56	48.5	0.002	0.21
Vinclozolin	5.0	0.012	0.30	14.2	0.010	0.13

Pesticide	ORANGES-Fresh (2000)			Orange Juice (1998)		
	% of Samples w/ Detections	Minimum Value Detected, ppm	Maximum Value Detected, ppm	% of Samples w/ Detections	Minimum Value Detected, ppm	Maximum Value Detected, ppm
Imazalil	64.4	0.010	0.50	4.7	0.017	0.25
Thiabendazole	29.7	0.010	0.68	3.7	0.050	0.35

PDP in Appendix E that were most likely generated by postharvest applications in the raw agricultural commodity include residues of the fungicides dicloran (nectarines and peaches), imazalil (oranges), iprodione (carrots, cherries, grapes, nectarines, peaches, and strawberries), and thiabendazole (apples and oranges). The postharvest use of chlorpropham as a growth regulator (sprout inhibitor) on potatoes accounts for the 65 percent detection rate obtained by PDP.

◆ Environmental Contaminants

DDT, DDD, and DDE

A total of 8,907 fruit and vegetables, 716 peanut butter, 178 rice, and 476 poultry samples were screened for DDE p,p', a metabolite of DDT. Other DDT metabolites tested include DDE o,p', DDD o,p', and DDD p,p'. Use of DDT has been prohibited in the United States since 1972. However, due to the persistence of this chemical in the environment, residues of the DDE p,p' metabolite were detected in 0.8 percent of the 10,277 samples tested. Residues of DDE p,p' were found primarily in carrots (22.3 percent), potatoes (2.4 percent), and poultry adipose (2.1 percent) samples. No residues of DDT or its metabolites were detected in any of the rice samples tested. All detections of DDT metabolites were below the established action levels.

OTHER EXTRANEIOUS PESTICIDES

All aldrin, dieldrin (also a metabolite of aldrin), heptachlor, and chlordane uses (except termiticide uses) were canceled for use in the United States in 1974, 1978, and 1986, respectively. However, residues of chlordane, dieldrin, and heptachlor epoxide (metabolite of heptachlor) were detected in cucumber and winter squash samples. Dieldrin was found in 16.3 percent of cucumbers, 4.4 percent of cantaloupe, 2.7 percent of carrots, and less than 1 percent of potato samples. Heptachlor epoxide was detected in 1.1 percent of cucumbers and less than 1 percent of carrots. Chlordane cis and trans were also detected in carrots, both at 2.3 percent (Appendix E). All detections were below the established action levels.

◆ Single/Selective Residue Analyses

BENOMYL

A total of 1,650 samples (410 cantaloupe, 367 cucumbers, 513 fresh/frozen strawberries, and 360 sweet bell peppers) were tested for benomyl, as the

carbendazim metabolite. Carbendazim residues were detected in 18 percent of the strawberries, in 1.4 percent of sweet bell peppers, 0.3 percent of cucumbers, and 0.2 percent of cantaloupe. There was one detection in sweet bell peppers that exceeded the established tolerance. All other detections were at levels below the established tolerances.

FORMETANATE

A total of 1,032 samples (173 apples, 333 nectarines, and 526 oranges) were tested for formetanate. Formetanate residues were detected in 15.6 percent of the nectarines and 0.2 percent of the oranges. There were no detections in apples. All detections were at levels well below the established tolerances.

◆ Multiple Residue Detections

The PDP database provides information that can be used by EPA in evaluating the incidence of multiple residue detections. Multiple residue detections may derive from various sources such as applications of more than one pesticide on a crop during a growing season, spray drift, transfer through crop rotation, cross contamination at packing facilities, or persistent environmental residues. The multiple residue information is particularly useful in responding to the NAS report *Pesticides in the Diets of Infants and Children* (National Research Council, National Academy Press, Washington, DC, 1993), which recommended that coordinated recording of multiple residue scans would make possible more accurate evaluation of exposure distributions for multiple chemicals.

PDP data will be useful in assessing the cumulative effects of pesticides with similar mechanisms of action such as cholinesterase inhibitors and endocrine disruptors. The distribution of multiple residues in the PDP database is given in Appendix L. These data indicate that more than one pesticide residue was detected in 35 percent of all samples tested. No correlation exists between the incidence of multiple residues and tolerance violations.

◆ Import vs. Domestic Residue Comparisons

The data generated by PDP reflect pesticide residues in foods available to the United States consumer, including both domestic and imported products. Most commodities are almost entirely of domestic origin with only a minor import component. Other crops, such as cantaloupe, cucumbers, grapes,

peaches, pineapples, and sweet bell peppers, are domestic during warm weather months and imported during winter months. Appendix D shows a comparison of selected residues detected in fresh cucumbers and sweet bell peppers grown in the United States and Mexico, residues detected in grapes and peaches grown in the United States and Chile, and residues detected in cantaloupe in the United States, Mexico, and Central American countries (Costa Rica, Guatemala, Honduras, and Nicaragua). The data indicate that for cucumbers, a much higher percent of Mexican cucumbers had detectable residues and residue profiles are different from those of the United States and the Central American countries. Seven percent of the Mexican samples had dieldrin residues, compared to 22 percent of the United States samples. Conversely, Mexican cucumbers were found to contain residues of endosulfan I, endosulfan II, and endosulfan sulfate at 65, 53, and 81 percent, respectively, compared with 26, 23, and 35 percent detected in the United States product.

For sweet bell peppers, 94 percent of Mexican product had residues, compared to 65 percent of United States samples. The percent of Mexican sweet bell peppers containing residues of chlorpyrifos, endosulfans, methamidophos, omethoate, and oxamyl was higher than those for sweet bell peppers grown in the United States. Detection rates for acephate, dicofol, metalaxyl, and methomyl were higher for the United States grown product.

For grapes, 90 percent of Chilean product had residues, compared to 56 percent of United States samples. The percent of Chilean grapes containing residues of captan, dimethoate, iprodione, and omethoate was higher than those for grapes grown in the United States. The detection rate for myclobutanil was higher for the United States grown product.

For peaches, 97 percent of Chilean product had residues, compared to 91 percent of United States samples. The percent of Chilean peaches containing residues of azinphos methyl, chlorpyrifos, fenvalerate, and iprodione was higher than those for peaches grown in the United States. Detection rates for dicloran and phosmet were higher for the United States grown product. The detection rate for carbaryl was about the same for the Chilean and United States products.

For cantaloupe, imports from Costa Rica, Guatemala, Honduras, and Nicaragua were combined to compare them with domestic product. This approach was taken because of the regional similarities shared by these Central American countries and to attain a larger number of samples to make a valid comparison to domestic commodities. Domestic cantaloupe had less residues of endosulfan sulfate, methamidophos, methomyl, and thiabendazole than the Mexican and Central American imports.

◆ Tolerance Violations

A tolerance is defined under Section 408 of the Federal Food, Drug, and Cosmetic Act as the maximum quantity of a pesticide residue allowable on a raw agricultural commodity and is applicable to processed foods. EPA is in the process of reassessing tolerances to ensure that they meet the standards required by FQPA. Under FQPA, the safety standard for a pesticide tolerance is defined as "a reasonable certainty that no harm will result from aggregate exposure to the chemical residue, including all anticipated dietary exposures for which there is reliable information."

A tolerance violation occurs when a residue is found that exceeds the tolerance level or when a residue is found for which there is no tolerance for that particular crop. With the exception of meat, poultry, and egg products, for which USDA is responsible, tolerances for all other foods (imported and domestic foods moved through interstate commerce) are enforced by FDA at the National level and by the States at the local level. When agencies with regulatory enforcement authority collect samples for tolerance enforcement purposes, they must adhere to a quick turnaround time and chain-of-custody protocols which allow them to detain the sampled lot until test results are available. PDP is not an enforcement program. Consequently, sample analysis does not have to be completed quickly (emphasis is placed on searching for residues at the lowest detectable levels--not on quick turn-around time) and sample collection does not interfere with commodity distribution. Samples with residues exceeding the tolerance or samples with residues for which there was no tolerance listed under the Code of Federal Regulations (CFR), Title 40, Part 180 were reported to FDA regional and headquarters offices. This is done in accordance with a Memorandum of

Understanding between USDA and FDA for the purpose of pinpointing areas where closer surveillance may be needed. FDA enforcement action on PDP samples generally is not a viable option due to the time lag from sample collection to data reporting.

Residues exceeding the established tolerance are noted as “X” in Appendices E, G, H, and I. Similarly, residues for which a tolerance could not be found in the 40 CFR, Part 180 are listed as “V.” A tolerance expression may apply to more than one residue because pesticides may breakdown into one or more metabolites or contain more than one isomer. For example, the tolerance for endosulfans combines residues of endosulfan I, endosulfan II, and endosulfan sulfate; organophosphate tolerances may combine the parent compound and the sulfone and sulfoxide metabolites. Therefore, where applicable (i.e., if residues of metabolites were detected in the same sample), PDP combined residues of parent and metabolites of endosulfan, ethion, fenamiphos, and quintozene and isomers of lambda cyhalothrin and iprodione to count the total number of samples with tolerance violations. The “X” and “V” annotations are followed by a number indicating the number of samples reported to FDA.

Residues exceeding the tolerance were detected in 0.2 percent of all composite samples tested in 2000 (19 samples with 1 residue each). Residues with no tolerance listed in 40 CFR, Part 180 were found in 1.2 percent of the samples (123 samples with 1 residue, 9 samples with 2 residues each, and 2 samples with 3 residues each). In most cases, these residues were detected at very low levels and may be due to spray drift or crop rotations. These residue findings are listed in Appendix M.

◆ Synopsis

In 2000, a total of 8,912 fresh and processed fruit and vegetable samples, 716 peanut butter samples, 178 rice samples, and 1,101 poultry samples were analyzed for various pesticides including insecticides, herbicides, and fungicides. Samples were analyzed using MRMs capable of detecting various organochlorines, organophosphates, organosulfurs, organonitrogens, and N-methyl carbamates. SRMs were used for benomyl in cantaloupe, cucumbers, strawberries, and sweet bell peppers and for metanate in apples, nectarines, and oranges. In addition, 534 single servings of peaches were collected and analyzed.

Approximately 80 percent of all samples tested were domestic, 19 percent were imported, and less than 1 percent were of unknown origin. Of all samples tested, 0.2 percent were reported as containing residues exceeding the tolerance and 1.2 percent as without tolerances listed in 40 CFR, Part 180.

Overall, 43 percent of all samples had no detectable residues, 22 percent contained one residue, and 35 percent contained more than one residue. Most of the residues were detected in fruit and vegetable commodities. Data for single servings of peaches were not significantly different from composite data. Environmental contaminants were detected mainly in carrots and cucumbers. Postharvest applications contributed significantly to the number of residues detected in apples, cherries, nectarines, oranges, peaches, and potatoes. Overall, levels of residues detected were below tolerances.

For more information on PDP, contact Martha Lamont, Director, Monitoring Programs Office (703) 330-2300 Ext. 17, facsimile: (703) 369-0678, e-mail: Martha.Lamont@usda.gov.



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Appendix A

Commodity History (A Chronological Listing)

Appendix A shows a chronological listing of all commodities sampled since the inception of the program through December 2001.

COMMODITY HISTORY

Fresh Commodities

Start Date	End Date	Months in Program	Commodity
May-91	Dec-96	65*	Grapes
May-91	Dec-94	44	Lettuce
May-91	Dec-95	56	Potatoes
Aug-91	Dec-93	29	Grapefruit
Aug-91	Dec-96	62*	Oranges
Sep-91	Dec-96	61*	Apples
Sep-91	Sep-95	49	Bananas
Feb-92	Mar-94	26	Celery
Feb-92	Dec-95	47	Green Beans
Feb-92	Sep-96	55*	Peaches
Oct-92	Dec-94	27	Broccoli
Oct-92	Sep-96	48*	Carrots
Jan-95	Sep-97	30*	Spinach
Feb-95	Jan-98	3 [@]	Wheat
Jan-96	Oct-98	31*	Milk
Jan-96	Jun-98	27*	Sweet Potatoes
Jul-96	Jun-99	33*	Tomatoes
Dec-96	Feb-98	2 [@]	Soybeans
Jan-97	Jun-99	30	Pears
Jan-97	Jun-99	30	Winter Squash
Jan-98	Sep-00	33	Strawberries**
Jul-98	Jun-00	24	Cantaloupe
Jan-99	Dec-00	24	Cucumbers
Jan-99	Dec-00	24	Sweet Bell Peppers
May-00	Aug-01	6 ¹	Cherries
Jul-00	Sep-01	6 ²	Nectarines
Jul-00			Pineapples
Oct-01			Mushrooms
Jan-02			Asparagus
Jan-02			Onions

* Excludes sampling hiatus September (partial) - November 1996

** Frozen collected when fresh unavailable

@ Crop Years

¹ Sampling adjusted for market availability. Cherries were sampled for two years (May-00 - Aug-01) for a total of six months.

² Sampling adjusted for market availability. Nectarines were sampled for two years (Jul-00 - Sep-01) for a total of six months.

Reintroduced Commodities

Start Date	End Date	Months in Program	Commodity
Oct-99	Sep-01	24	Lettuce
Jan-00	Dec-01	24	Grapes
Jan-00	Dec-01	24	Green Beans
Jan-00	Dec-01	24	Oranges
Jul-00			Potatoes
Oct-00			Apples
Oct-00			Carrots
Jan-01			Bananas
Jan-01			Broccoli
Jan-01			Celery
Jan-01	Sep-01	9	Peaches
Oct-01			Peas / Canned
Oct-01			Sweet Corn / Canned

Processed Commodities

Start Date	End Date	Months in Program	Commodity	Type
Apr-94	Mar-96	24	Sweet Corn	Canned/Frozen
Apr-94	Jun-96	27	Peas	Canned/Frozen
Jan-96	Jun-98	27*	Green Beans	Canned/Frozen
Jul-96	Dec-98	27*	Apple Juice	Processed
Dec-96	Dec-97	13	Peaches	Canned
Jan-97	Dec-98	24	Orange Juice	Processed
Apr-97	Jun-99	27	Winter Squash	Frozen
Oct-97	Dec-98	15	Spinach	Canned
Jan-98	Jun-99	17***	Corn Syrup	Processed
Jan-98	Dec-99	24	Grape Juice	Processed
Jan-98	Sep-00	33	Strawberries	Frozen**
Jan-99	Dec-99	12	Spinach	Frozen
Jul-99	Jun-00	12	Pears	Canned
Jul-99	Jun-00	12	Tomatoes	Canned
Jul-99	Apr-00	9	Oats	Processed
Jan-00	Dec-00	12	Peanut Butter	Processed
Oct-00			Rice	Processed
Jan-01	Jun-01	6	Tomatoe Paste	Canned
Oct-01			Barley	Processed

* Excludes sampling hiatus September - November 1996

** Frozen collected when fresh unavailable

*** Excludes sampling hiatus January 1999

Special Projects (Single Serving Surveys)

Start Date	End Date	Months in Program	Commodity	Analyte(s)
Dec-96	Dec-97	13	Potatoes	Aldicarb
Jul-98	Jun-99	12	Pears	Organophosphates
Jan-99	Dec-99	12	Apples	Organophosphates
Jan-99	May-99	5	Apples	Carbamates
Jan-00	Sep-00	9	Peaches	Carbamate, Organochlorine, Organophosphate, Organonitrogen, and Sulfur compounds

Drinking Water

Start Date	End Date	Months in Program	Commodity	States
Mar-01			Drinking Water	California and New York

Meat / Poultry Products

Start Date	End Date	Months in Program	Commodity	Type
Apr-00	Mar-01	12	Poultry	Young Chickens
Jun-01			Beef	Cows, Heifers, and Steers

Appendix B

Sample Origin by State or Country (Determined by Grower, Packer, or Distributor)

Appendix B gives the number of fruit and vegetable, peanut butter and rice samples per State or country of origin and the number of samples of unknown origin. Where available, origin of fresh commodities is taken from the grower or packer information. For processed commodities, origin is determined primarily by packer or distributor.

As shown in Appendix B, fruit and vegetable samples originated from 38 States and 21 foreign countries. There were 227 domestic and 4 imported samples from unknown origins.

Poultry samples are excluded from Appendix B. Figure 4 shows the State of origin for poultry liver samples.

**APPENDIX B. SAMPLE ORIGIN BY STATE OR COUNTRY *
(Determined by Grower, Packer, or Distributor)**

Part 1. Domestic Samples

States = 38	Fresh F&V																Processed F&V			Nuts	Grain	No. of Domestic	% of Total
	AP	CH	CN	CR	CU	GB	GR	LT	NE	OG	PC	CX	PN	PO	PP	ST	CP	SZ	TC	PB	RI		
Arizona			21		3	3	6	3		2	1	1		1	1		1		1			44	0.4
Arkansas																	7	1	2	2	17	29	0.3
California	16	47	92	111	62	108	364	670	288	618	181	180	50	61	215	403	179	19	199	112	24	3,999	40.8
Colorado		5		11	3	5		1			1	1		16	1				1			45	0.5
Connecticut						1																1	<0.1
Delaware											1	1		5								7	0.1
Florida		1	25		99	152	3	6		68			85	5	179	67	12		3	11	2	718	7.3
Georgia			2		51	88					17	17			40		6		11	15	1	248	2.5
Hawaii													13									13	0.1
Idaho	3	12		2							3	3		75			8	4	14	11	3	138	1.4
Illinois					3	5									3		18	1	15	33	11	89	0.9
Indiana																			4			4	<0.1
Kentucky					2	1				1				2								6	0.1
Maine														2			5		3	2	2	14	0.1
Maryland					5	6		3		1				1	4		9	1	12	3		45	0.5
Massachusetts	1					1								1								3	<0.1
Michigan	19		3	15	26	16	2	1			2	2		12	9		9		12	28	7	163	1.7
Minnesota	5					2	5									14	2	1	4	4		37	0.4
Montana																1						1	<0.1
Nebraska																2						2	<0.1
Nevada			10												7							17	0.2
New Jersey					19	15		3	8		13	13		1	11		4		6	102	5	200	2
New Mexico								1							5							6	0.1
New York	16	1			12	18	1	1	1						17	12	17		6	71	6	179	1.8
North Carolina					7	8	1				1	1			2	14				8		42	0.4
Ohio	4		1		11	28	1	4							11	10	5	1	8	211	6	301	3.1
Oklahoma	2			3											4		3	4	6	5	1	28	0.3
Oregon	2	20		1	1	2									16	2	4	1	2		3	54	0.6
Pennsylvania					1	2	1		6		3	3		2	2		5		15	9		49	0.5
South Carolina					5						18	18			1							42	0.4
Tennessee						13									1							14	0.1
Texas	5		33	8	21	16	1	27		21	2	2		22	10	12	30	1	26	40	77	354	3.6
Utah	2																		1	2		5	0.1
Vermont											1	1										2	<0.1
Virginia	1				7	3	1							1	2		2			1	1	19	0.2
Washington	102	185		11	17	14	1	2	36		22	22		60	4	1	16		1	5	5	504	5.1
West Virginia						9					2	2										13	0.1
Wisconsin				1	1					2					13	1	4	1	2	4		29	0.3
Unknown State	2	4	5	3	37	67	8	4	4	6	5	5	1	3	25	15	8		6	14	5	227	2.3
No. of Domestic	180	275	192	166	393	583	395	726	343	719	273	272	149	365	544	498	354	36	361	691	176	7,691	
% of Total	98	100	47	90	53	81	53	98	99	97	51	51	41	99	74	96	97	98	98	97	99		78.4

Part 2. Imported Samples

Countries = 21	Fresh F&V																Processed F&V			Nuts	Grain	No. of Imports	% of Total								
	AP	CH	CN	CR	CU	GB	GR	LT	NE	OG	PC	CX	PN	PO	PP	ST	CP	SZ	TC	PB	RI										
Argentina							2																		2	<0.1					
Australia										12																15	0.2				
Bahamas					1																				1	<0.1					
Canada	3			16	20	2		7	2						4	34								5	93	0.9					
Chile							291				260	259													810	8.3					
China																									1	1	<0.1				
Costa Rica			44		1									170												215	2.2				
Dominican Republic			8													2										10	0.1				
Ecuador															8											8	0.1				
Guatemala			37		3	1																				41	0.4				
Honduras			35		11									19												65	0.7				
India																										1	<0.1				
Israel																2										2	<0.1				
Italy							1																			1	<0.1				
Mexico			88	1	299	112	38	5		2			16		138	20								1		720	7.3				
Netherlands																14										14	0.1				
New Zealand	1										1	1														3	<0.1				
Nicaragua			3																							3	<0.1				
South Africa							7			8														1		16	0.2				
Spain					2											1									1	4	<0.1				
Taiwan (R.O.C.)																									3	3	<0.1				
Unknown Country			1		2																					4	<0.1				
No. of Imports	4		216	17	339	115	339	12	2	22	261	260	215	4	190	20									8	1	1	5	1	2,032	
% of Total	2		53	9	46	16	46	2	1	3	49	49	59	1	26	4									2	<0.1	3	1	1		20.7

Part 3. Unknown Origin

	Fresh F&V																Processed F&V			Nuts	Grain	No. of Unknown	% of Total								
	AP	CH	CN	CR	CU	GB	GR	LT	NE	OG	PC	CX	PN	PO	PP	ST	CP	SZ	TC	PB	RI										
Unknown Origin			2	1	5	22	7	2	1	3	2	2			4											4	7	20	1	83	
% of Total			0.5	1	1	3	1	0.3	0.3	0.4	0.4	0.4			1											1	2	3	1		0.8

GRAND TOTALS 184 275 410 184 737 720 741 740 346 744 536 534 364 369 738 518 366 37 369 716 178 9,806

COMMODITIES		
AP = Apples	GR = Grapes	PN = Pineapples
CH = Cherries	LT = Lettuce	PO = Potatoes
CN = Cantaloupe	NE = Nectarines	PP = Sweet Bell Peppers
CR = Carrots	OG = Oranges	RI = Rice
CP = Pears, canned	PC = Peaches, composite	ST = Strawberries, fresh
CU = Cucumbers	CX = Peaches, single-serving	SZ = Strawberries, frozen
GB = Green Beans	PB = Peanut Butter	TC = Tomatoes, canned

* = Excludes poultry samples. Figure 4 shows the State of origin for poultry samples.

Appendix C

Quality Assurance Program Elements

PDP's Quality Assurance (QA) program covers all aspects of data gathering, from sample collection to data reporting. QA protocols for sampling are designed to protect sample integrity from the time of collection to the time of delivery at the testing facilities. QA protocols for testing comprise all laboratory operations from the time of sample receipt to the time data are reported to PDP's central database. PDP laboratories guarantee reported results by adherence to strict QA requirements. As described in this appendix, the QA program has five elements: 1) Standard Operating Procedures; 2) On-site Reviews; 3) Proficiency Check Samples; 4) Quality Control Procedures; and 5) Method Performance and Verification Procedures.

APPENDIX C. QUALITY ASSURANCE PROGRAM ELEMENTS

1. Standard Operating Procedures (SOPs) - Written SOPs are in place to provide uniform administrative, sampling, and laboratory procedures. SOPs are revised annually to accommodate changes in the program. Before submission, data are reviewed by each Quality Assurance Unit (QAU) for completeness and adherence to PDP requirements.

2. On-site Reviews - On-site reviews are performed to determine compliance with PDP SOPs. Improvements in sampling, chain-of-custody, recordkeeping, laboratory, and electronic data transmission procedures are made as a result of on-site reviews.

3. Proficiency Check Samples - All facilities are required to participate in PDP's Check Sample program. Check samples are issued to laboratories performing analysis with multiresidue methods and/or single/selective residue methods. Periodically, one to three prepared commodities, containing pesticide(s) of known quantities, are sent to the participating laboratories and tested under the same conditions as routine samples. The resulting data are used to determine performance equivalency among the testing laboratories, and to evaluate individual laboratory performance. During 2000, PDP laboratories received 3 proficiency sample sets consisting of 30 fruit and vegetable samples for multiresidue screening, 4 sets consisting of 12 fruit and vegetable samples for single/selective residue screening, 2 poultry multiresidue sets consisting of 7 samples, and 1 peanut butter multiresidue set consisting of 3 samples. For fruit and vegetable multiresidue screening, a total of 110 samples covering 10 commodities were fortified with 68 compounds, with 9 repeated once, 9 repeated twice, 1 repeated 3 times, and 1 repeated 4 times, at levels generally 1-10 times the limit of quantitation (LOQ). Results yield an overall mean recovery of 92 percent with a percent coefficient of variation (%C.V.) of 24 percent. Seventeen incurred residues were present in these sets in 7 commodities, with 2 residues occurring twice and 1 occurring 3 times, at levels ranging from 0.006 – 0.7 ppm.

4. Quality Control Procedures - PDP operating procedures for quality control (QC) are intended to assess method and analyst performance during sample preparation, clean-up, extraction, and, where applicable, derivatization. To maximize sample output and decrease the QC/sample ratio, samples are analyzed in analytical sets, not to exceed 20 samples per set, which include the sample set and the following components.

a. Reagent Blank: For analysis of fruit and vegetables and poultry, an amount of distilled water, equivalent to the natural moisture content of the commodity, is run through the entire analytical process to determine glassware cleanliness and system integrity. For rice and peanut butter analysis, performed by supercritical fluid extraction, an empty extraction cell is run through the analytical procedure to demonstrate system integrity.

b. Matrix Blank: A previously analyzed sample of the same commodity, which contains either very low concentrations of known residues or no detectable residues, is divided into two portions. The first portion is used to give background information on naturally occurring chemicals, and the second is used to prepare a matrix spike.

c. Matrix Spike(s): Prior to extraction, a portion(s) of matrix blank is spiked with marker pesticides to determine the accuracy of the analyst and instrument performance. Marker pesticides are compounds selected from different pesticide classes (organochlorines, organophosphates, carbamates), which have physical and chemical characteristics similar to those in the class they represent. The use of marker pesticides to monitor recoveries is a modification of PDP's previous requirements that called for spiking with all pesticides. Because of the large number of pesticides in the program, spiking with all compounds required multiple

spike mixtures to avert coelution problems, which, in turn, resulted in lengthy run times. During 2000, PDP laboratories quantitated a total of 23,284 matrix spikes, with an overall mean recovery of 91 percent, overall standard deviation of 26 percent, and overall %C.V. of 28 percent.

d. **Process Control Spike:** A compound of physical and chemical characteristics, similar to those of the pesticides being tested, is used to evaluate the analytical process on a sample-by-sample basis. Each of the analytical set components, except the reagent and matrix blanks, is spiked with process controls. During 2000, PDP laboratories quantitated a total of 47,386 process controls on 10,907 samples, with an overall mean recovery of 93 percent, overall standard deviation of 18 percent, and overall %C.V. of 20 percent. Of these process controls, 547 (1.2%) were rerun due to initial failure to meet PDP recovery criteria. These rerun values are not included in these statistics for illustrative purposes; however, reported data are those obtained from sample reanalysis.

5. Method Performance and Verification Procedures - Laboratories are required to determine and verify the limits of detection (LODs) and LOQs for each pesticide/commodity pair. LODs depend on matrix, analyte, and detector used, and range from 0.0004 to 0.20 ppm, with the exception of fenvalerate, reported by one laboratory as total combined fenvalerate, or fenvalerate plus the esfenvalerate isomer. (*Information on specific LODs and LOQs is available upon request.*) Verification by mass spectrometry or a suitable alternate detection system, is required for all initial determinations. Verified residue amounts above LOD and below LOQ are reported as below quantifiable level and assigned values at ? LOQ at the request of EPA for use in dietary risk assessment. If a detected residue exceeds the established tolerance, the sample is reanalyzed from the frozen homogenate, along with the appropriate blanks and a spike of the residue at the suspected level.

Appendix D

Import vs. Domestic Pesticide Residue Comparisons

PDP was designed to provide a comprehensive statistical picture of pesticide residues in the U.S. food supply, representing all sources including imports. Most commodities consumed are generally produced in the United States with import components that vary by commodity. However, several commodities tested over the past several years were cyclical; that is, part of the year the commodity was produced domestically and part of the year it was imported.

Appendix D compares residue data reported for samples originating in the United States with those of the same commodity from major exporting countries. Residue data for cucumbers and sweet bell peppers from the United States are compared with data for samples originating in Mexico for 1999 and 2000. Residue data for domestic grapes and peaches are compared with data for samples originating in Chile for 2000. For cantaloupe, 1998-2000 data from Costa Rica, Guatemala, Honduras, and Nicaragua were combined and compared with data from Mexico and the United States. Only residues detected in more than 10 percent of all samples are included in the detail section of each comparison. All pesticides detected were registered in the United States. However, the profiles of residue findings were markedly different in the United States samples versus samples from these exporting countries. The National differences in residue findings were due to the pesticides used to sustain crop protection based on the environment, climate, and growing conditions.

1999-2000 Distribution of Residues for Cucumbers United States Samples vs. Samples Originating in Mexico

Origin	Year	# of Samples Analyzed	# of Samples w/ Detections	% of Samples w/ Detections	# of Residues Detected
United States	1999	387	225	58	504
	2000	393	262	67	604
	1999-2000	780	487	62	1108
Mexico	1999	319	291	91	863
	2000	299	275	92	788
	1999-2000	618	566	92	1651

NOTE: The Limits of Detection (LODs) for pesticide detections in cucumbers are listed in Appendix E.

1999-2000 Distribution of Residues for Cucumber Samples Originating in Mexico vs. United States (Only Pesticides with Residue Detections in at least 10% of all Samples)

Pesticide	Origin	# of Samples Analyzed	# of Samples w/ Detections	% of Samples w/ Detections
Dieldrin	United States	778	168	22
	Mexico	615	46	7
Endosulfan I	United States	778	201	26
	Mexico	616	403	65
Endosulfan II	United States	778	177	23
	Mexico	616	329	53
Endosulfan sulfate	United States	778	276	35
	Mexico	616	502	81
Metalaxyl	United States	199	7	4
	Mexico	180	19	11
Methamidophos	United States	778	25	3
	Mexico	616	148	24

1999-2000 Distribution of Residues for Sweet Bell Peppers United States Samples vs. Samples Originating in Mexico

Origin	Year	# of Samples Analyzed	# of Samples w/ Detections	% of Samples w/ Detections	# of Residues Detected
United States	1999	525	335	64	959
	2000	544	361	66	852
	1999-2000	1,069	696	65	1,811
Mexico	1999	156	146	94	855
	2000	138	129	93	686
	1999-2000	294	275	94	1,541

NOTE: The Limits of Detection (LODs) for pesticide detections in sweet bell peppers are listed in Appendix E.

1999-2000 Distribution of Residues for Sweet Bell Pepper Samples Originating in Mexico vs. United States (Only Pesticides with Residue Detections in at least 10% of all Samples)

Pesticide	Origin	# of Samples Analyzed	# of Samples w/ Detections	% of Samples w/ Detections
Acephate	United States	1,058	276	26
	Mexico	291	35	12
Chlorpyrifos	United States	1,066	37	3
	Mexico	294	181	62
Dicofol p,p'	United States	1,054	119	11
	Mexico	294	22	7
Endosulfan I	United States	1,046	76	7
	Mexico	292	177	61
Endosulfan II	United States	1,047	93	9
	Mexico	292	192	66
Endosulfan sulfate	United States	1,047	72	7
	Mexico	292	181	62
Metalaxyl	United States	933	150	16
	Mexico	228	24	11
Methamidophos	United States	1,058	301	28
	Mexico	291	162	56
Methomyl	United States	1,066	190	18
	Mexico	294	18	6
Omethoate	United States	1,058	47	4
	Mexico	289	80	28
Oxamyl	United States	1,066	82	8
	Mexico	294	54	18

2000 Distribution of Residues for Grapes and Peaches United States Samples vs. Samples Originating in Chile

Origin	Commodity	Year	# of Samples Analyzed	# of Samples w/ Detections	% of Samples w/ Detections	# of Residues Detected
U.S.	Grapes	2000	395	220	56	313
Chile	Grapes	2000	291	263	90	654
U.S.	Peaches	2000	273	249	91	787
Chile	Peaches	2000	260	252	97	1067

NOTE: The Limits of Detection (LODs) for pesticide detections in grapes and peaches are listed in Appendix E.

2000 Distribution of Residues for Grape and Peach Samples Originating in Chile vs. United States (Only Pesticides with Residue Detections in at least 10% of all Samples)

Pesticide	Origin	Commodity	# of Samples Analyzed	# of Samples w/ Detections	% of Samples w/ Detections
Captan	United States	Grapes	395	5	1
	Chile	Grapes	291	201	69
Dimethoate	United States	Grapes	395	2	1
	Chile	Grapes	291	78	27
Iprodione	United States	Grapes	395	67	17
	Chile	Grapes	291	138	47
Myclobutanil	United States	Grapes	395	133	34
	Chile	Grapes	291	8	3
Omethoate	United States	Grapes	395	1	<1
	Chile	Grapes	291	91	31
Azinphos methyl	United States	Peaches	273	32	12
	Chile	Peaches	260	188	72
Carbaryl	United States	Peaches	273	42	15
	Chile	Peaches	260	41	16
Chlorpyrifos	United States	Peaches	273	35	13
	Chile	Peaches	260	133	51
Dicloran	United States	Peaches	273	82	30
	Chile	Peaches	260	3	1
Fenvalerate	United States	Peaches	273	18	7
	Chile	Peaches	260	59	23
Iprodione	United States	Peaches	273	133	49
	Chile	Peaches	260	204	78
Iprodione met. isomer	United States	Peaches	273	68	25
	Chile	Peaches	260	139	53
Phosmet	United States	Peaches	273	130	48
	Chile	Peaches	260	66	25

**1998-2000 Distribution of Residues for Cantaloupe
United States Samples vs. Samples Originating in
Central America* and Mexico**

Origin	Year	# of Samples Analyzed	# of Samples w/ Detections	% of Samples w/ Detections	# of Residues Detected
United States	1998 ¹	382	144	38	183
	1999	551	217	39	302
	2000 ²	192	74	39	96
	1998-2000	1,125	435	39	581
Central America*	1998 ¹	5	5	100	7
	1999	147	123	84	247
	2000 ²	119	91	76	144
	1998-2000	271	219	81	398
Mexico	1998 ¹	26	17	65	23
	1999	115	80	70	135
	2000 ²	88	61	69	87
	1998-2000	229	158	69	245

**1998-2000 Distribution of Residues for Cantaloupe Samples
Originating in Central America* and Mexico vs. United States
(Only Pesticides with Residue Detections in at least 10% of all Samples)**

Pesticide	Origin	# of Samples Analyzed	# of Samples w/ Detections	% of Samples w/ Detections
Endosulfan sulfate	United States	1,120	153	14
	Central America*	267	157	59
	Mexico	223	120	54
Methamidophos	United States	1,120	25	2
	Central America*	267	28	10
	Mexico	223	53	24
Methomyl	United States	1,120	47	4
	Central America*	267	90	34
	Mexico	223	10	4
Thiabendazole	United States	1,125	12	1
	Central America*	271	66	24
	Mexico	229	10	4

* Combined findings from Costa Rica, Guatemala, Honduras, and Nicaragua.

¹ Samples collected for only 6 months in 1998 (July - December).

² Samples collected for only 6 months in 2000 (January - June).

NOTE: The Limits of Detection (LODs) for pesticide detections in cantaloupe are listed in Appendix E.

Appendix E

Distribution of Residues by Pesticide in Fruit and Vegetables

Appendix E shows residue detections for all fruit and vegetable pesticide/commodity pairs tested, including range of values detected, range of Limits of Detection (LODs), and Environmental Protection Agency (EPA) and Codex Maximum Residue Limit/Extraneous Maximum Residue Limit (MRL/EMRL) tolerance references for each pair.

In 2000, 8,912 fruit and vegetable samples were analyzed, of which 8,378 were composite samples and 534 were single serving samples (peaches).

PDP reports tolerance violations to the Food and Drug Administration (FDA) as part of an interagency Memorandum of Understanding between the U.S. Department of Agriculture and FDA. Residues reported to FDA are shown in the "Pesticide/Commodity" column to the right of the commodity and are annotated as "X" (if the residue exceeded the established tolerance) or "N" (if the residue did not have a tolerance listed in the Code of Federal Regulations (CFR), Title 40, Part 180). In both cases, these annotations are followed by a number indicating the number of samples reported to FDA.

Codex MRLs in commodities represent toxicological pesticide residue levels, based on Acceptable Daily Intakes (ADIs) permitted by the Joint (Food and Agriculture/World Health Organization -FAO/WHO) Meeting on Pesticide Residues (JMPR). The JMPR is an independently appointed panel of expert scientists. Similarly, EMRLs represent acceptable levels of persistent pesticides in the environment which are no longer registered for use in agriculture.

MRLs/EMRLs used in this appendix are values of pesticides and their metabolites, for the commodities either individually or part of a commodity group, as they appear in the Codex Alimentarius (Codex Alimentarius Commission, Joint FAO/WHO Food Standards Programme, Codex Committee on Pesticide Residues, Thirty-second Session, The Hague, The Netherlands, 1-8 May 2000, *Residues of Pesticides in Foods and Animal Feeds*, Food and Agriculture Organization of the United Nations/World Health Organization, Agenda Item 6, CX PR 00/5, April 2000; and Codex Alimentarius Commission, Joint FAO/WHO Food Standards Programme, Codex Committee on Pesticide Residues, Thirty-third Session, The Hague, The Netherlands, 2-7 April 2001, *Consideration of Draft and Proposed Draft Maximum Residue Limits in Foods and Animal Feeds at Steps 7 and 4*, Food and Agriculture Organization of the United Nations/World Health Organization, Agenda Item 6, CX PR 01/9, March 2001).

APPENDIX E. DISTRIBUTION OF RESIDUES BY PESTICIDE IN FRUIT AND VEGETABLES

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
1 1-Napthol (metabolite of Carbaryl)							
Green Beans	510	0			0.015 ^	10	-
Sweet Bell Peppers	<u>527</u>	<u>1</u>	0.2	0.025 ^	0.015 ^	10	-
Total	1037	1					
2 3-Hydroxycarbofuran (metabolite of Carbofuran)							
Apples	184	0			0.017 ^	NT	-
Cantaloupe	406	0			0.010 - 0.013	0.2	-
Carrots	184	0			0.002 - 0.013	NT	0.5
Cherries	275	0			0.010 - 0.013	NT	-
Cucumbers	737	0			0.013 - 0.017	0.2	-
Grapes	741	1	0.1	0.017 ^	0.010 - 0.013	0.2	-
Green Beans	719	0			0.003 - 0.013	NT	-
Lettuce	740	0			0.012 - 0.013	NT	-
Nectarines	96	0			0.013 ^	NT	-
Oranges	215	0			0.013 ^	NT	-
Peaches, Composite	536	0			0.010 ^	NT	-
Peaches, Single Serving	534	0			0.010 ^	NT	-
Pears, Canned	366	0			0.012 - 0.013	NT	-
Pineapples	104	0			0.013 ^	NT	-
Potatoes	369	0			0.012 - 0.013	1	0.1
Strawberries, Fresh	518	0			0.013 - 0.020	0.2	-
Strawberries, Frozen	37	0			0.013 - 0.020	0.2	-
Sweet Bell Peppers	738	1	0.1	0.013 ^	0.003 - 0.013	0.2	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.013 - 0.020	NT	0.1
Total	7868	1					
3 Acephate (insecticide)							
Apples	184	0			0.006 ^	0.02	-
Cantaloupe	406	0			0.002 - 0.006	0.02	-
Carrots	184	0			0.002 ^	0.02	-
Cherries	275	0			0.002 - 0.004	0.02	-
Cucumbers (X-2)	737	4	0.5	0.010 - 0.079	0.002 - 0.006	0.02	-
Grapes	142	0			0.002 ^	0.02	-
Green Beans	720	192	26.7	0.003 - 1.6	0.002 - 0.003	3	-
Lettuce	740	112	15.1	0.003 - 0.16	0.002 - 0.005	10	5
Nectarines	96	0			0.002 ^	0.02	-
Oranges	215	0			0.002 ^	0.02	-
Peaches, Composite (X-1)	536	1	0.2	0.026 ^	0.004 ^	0.02	-
Peaches, Single Serving	534	1	0.2	0.023 ^	0.004 ^	0.02	-
Pears, Canned	366	1	0.3	0.008 ^	0.002 - 0.005	0.02	-
Pineapples	104	0			0.002 ^	0.02	-
Potatoes	369	1	0.3	0.008 ^	0.002 - 0.005	0.02	0.5
Strawberries, Fresh	518	0			0.002 - 0.010	0.02	-
Strawberries, Frozen	37	0			0.002 - 0.010	0.02	-
Sweet Bell Peppers	738	151	20.5	0.003 - 1.3	0.002 - 0.003	4.0	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.002 - 0.010	0.02	1
Total	7270	463					
4 Aldicarb (insecticide)							
Apples	184	0			0.020 ^	NT	-
Cantaloupe	406	0			0.012 - 0.021	NT	-
Carrots	184	0			0.002 - 0.012	NT	-
Cherries	275	0			0.008 - 0.012	NT	-
Cucumbers	737	0			0.012 - 0.020	NT	-
Grapes	142	0			0.012 ^	NT	0.2
Green Beans	719	0			0.002 - 0.012	NT	-
Lettuce	630	0			0.012 - 0.020	NT	-
Nectarines	96	0			0.012 ^	NT	-
Oranges	197	0			0.012 ^	0.3	0.2
Peaches, Composite	536	0			0.008 ^	NT	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Peaches, Single Serving	534	0			0.008 ^	NT	-
Pears, Canned	235	0			0.012 - 0.020	NT	-
Pineapples	104	0			0.012 ^	NT	-
Potatoes	369	0			0.012 - 0.020	1	-
Strawberries, Fresh	518	0			0.012 - 0.020	NT	-
Strawberries, Frozen	37	0			0.012 - 0.020	NT	-
Sweet Bell Peppers	738	0			0.002 - 0.012	NT	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.012 - 0.020	NT	-
Total	7010	0					
5 Aldicarb sulfone (metabolite of Aldicarb)							
Apples	184	0			0.022 ^	NT	-
Cantaloupe	406	0			0.021 - 0.041	NT	-
Carrots	184	0			0.002 - 0.021	NT	-
Cherries	275	0			0.010 - 0.025	NT	-
Cucumbers	737	0			0.021 - 0.022	NT	-
Grapes	142	0			0.021 ^	NT	0.2
Green Beans	719	0			0.004 - 0.021	NT	-
Lettuce	740	0			0.021 - 0.075	NT	-
Nectarines	96	0			0.021 ^	NT	-
Oranges	744	0			0.003 - 0.021	0.3	0.2
Peaches, Composite	536	0			0.010 ^	NT	-
Peaches, Single Serving	534	0			0.010 ^	NT	-
Pears, Canned	366	0			0.021 - 0.075	NT	-
Pineapples	104	0			0.021 ^	NT	-
Potatoes	369	2	0.5	0.035 - 0.13	0.021 - 0.075	1	-
Strawberries, Fresh	518	0			0.020 - 0.021	NT	-
Strawberries, Frozen	37	0			0.020 - 0.021	NT	-
Sweet Bell Peppers	738	0			0.004 - 0.021	NT	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.003 - 0.021	NT	-
Total	7798	2					
6 Aldicarb sulfoxide (metabolite of Aldicarb)							
Apples	184	0			0.017 ^	NT	-
Cantaloupe	406	0			0.027 - 0.036	NT	-
Carrots	184	0			0.002 - 0.027	NT	-
Cherries	275	0			0.010 - 0.032	NT	-
Cucumbers	737	0			0.017 - 0.027	NT	-
Grapes	142	0			0.027 ^	NT	0.2
Green Beans	719	0			0.004 - 0.027	NT	-
Lettuce	740	0			0.027 - 0.076	NT	-
Nectarines	96	0			0.027 ^	NT	-
Oranges	744	3	0.4	0.005 ^	0.003 - 0.027	0.3	0.2
Peaches, Composite	536	0			0.010 ^	NT	-
Peaches, Single Serving	534	0			0.010 ^	NT	-
Pears, Canned	366	0			0.027 - 0.076	NT	-
Pineapples	104	0			0.027 ^	NT	-
Potatoes	369	3	0.8	0.045 - 0.32	0.027 - 0.076	1	-
Strawberries, Fresh	518	0			0.020 - 0.027	NT	-
Strawberries, Frozen	37	0			0.020 - 0.027	NT	-
Sweet Bell Peppers	738	0			0.004 - 0.027	NT	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.003 - 0.027	NT	-
Total	7798	6					
7 Aldrin (insecticide) (parent of Dieldrin)							
Cherries	199	0			0.004 ^	0.3 ^{AL}	-
Peaches, Composite	527	0			0.001 - 0.004	0.02 ^{AL}	-
Peaches, Single Serving	525	0			0.001 - 0.004	0.02 ^{AL}	-
Strawberries, Fresh	387	0			0.003 ^	0.05 ^{AL}	-
Strawberries, Frozen	7	0			0.003 ^	0.05 ^{AL}	-
Tomatoes, Canned	<u>262</u>	<u>0</u>			0.003 ^	0.05 ^{AL}	0.1
Total	1907	0					

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
8 Allethrin (insecticide)							
Peaches, Composite	10	1	10.0	0.013 ^	0.001 - 0.008	EX	-
Peaches, Single Serving	<u>10</u>	<u>1</u>	10.0	0.039 ^	0.001 - 0.008	EX	-
Total	20	2					
9 Allidochlor (herbicide)							
Cherries	199	0			0.010 ^	NT	-
Peaches, Composite	527	0			0.010 - 0.030	NT	-
Peaches, Single Serving	<u>526</u>	<u>0</u>			0.010 - 0.030	NT	-
Total	1252	0					
10 Ametryn (herbicide)							
Carrots	54	0			0.010 ^	NT	-
Cherries	58	0			0.010 ^	NT	-
Cucumbers	107	0			0.010 ^	NT	-
Grapes	34	0			0.010 ^	NT	-
Green Beans	102	0			0.010 ^	NT	-
Lettuce	108	0			0.010 ^	NT	-
Nectarines	96	0			0.010 ^	NT	-
Oranges	89	0			0.010 ^	NT	-
Pineapples	364	0			0.010 ^	0.25	-
Potatoes	36	0			0.010 ^	NT	-
Strawberries, Fresh	34	0			0.010 ^	NT	-
Strawberries, Frozen	1	0			0.010 ^	NT	-
Sweet Bell Peppers	<u>107</u>	<u>0</u>			0.010 ^	NT	-
Total	1190	0					
11 Anilazine (fungicide)							
Apples	184	0			0.018 ^	NT	-
Cantaloupe	286	0			0.052 ^	NT	-
Cucumbers	526	0			0.018 ^	NT	-
Strawberries, Fresh (V-5)	387	5	1.3	0.14 - 0.26	0.083 ^	NT	-
Strawberries, Frozen	7	0			0.083 ^	NT	-
Tomatoes, Canned	<u>262</u>	<u>0</u>			0.025 - 0.083	NT	10
Total	1652	5					
12 Atrazine (herbicide)							
Apples	184	0			0.025 ^	NT	-
Cantaloupe	406	0			0.010 - 0.019	NT	-
Carrots	184	0			0.002 - 0.010	NT	-
Cherries	275	0			0.002 - 0.010	NT	-
Cucumbers	737	0			0.010 - 0.025	NT	-
Grapes	142	0			0.010 ^	NT	-
Green Beans	252	0			0.010 - 0.014	NT	-
Lettuce	740	0			0.010 - 0.024	NT	-
Nectarines	96	0			0.010 ^	NT	-
Oranges	215	0			0.010 ^	NT	-
Peaches, Composite	536	0			0.002 ^	NT	-
Peaches, Single Serving	534	0			0.002 ^	NT	-
Pears, Canned	366	0			0.010 - 0.024	NT	-
Pineapples	104	0			0.010 ^	NT	-
Potatoes	369	0			0.010 - 0.024	NT	-
Strawberries, Fresh	518	0			0.010 - 0.017	NT	-
Strawberries, Frozen	37	0			0.010 - 0.017	NT	-
Sweet Bell Peppers	738	0			0.010 - 0.014	NT	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.010 - 0.017	NT	-
Total	6802	0					
13 Azinphos (insecticide)							
Cantaloupe	30	0			0.006 ^	2.0	-
Cucumbers	14	0			0.006 ^	2.0	-
Grapes	18	0			0.006 ^	4.0	-
Green Beans	18	0			0.006 ^	2.0	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Lettuce	18	0			0.006 ^	NT	-
Oranges	54	0			0.006 ^	2.0	-
Pears, Canned	18	0			0.006 ^	1.5	-
Strawberries, Fresh	9	0			0.006 ^	2.0	-
Strawberries, Frozen	9	0			0.006 ^	2.0	-
Sweet Bell Peppers	14	0			0.006 ^	0.3	-
Tomatoes, Canned	<u>18</u>	<u>0</u>			0.006 ^	2.0	-
Total	220	0					
14 Azinphos methyl (insecticide)							
Apples	184	78	42.4	0.018 - 0.23	0.011 ^	1.5	2
Cantaloupe	406	0			0.008 - 0.013	2.0	0.5
Carrots	184	0			0.003 - 0.008	NT	0.5
Cherries	275	163	59.3	0.010 - 0.44	0.006 - 0.008	2.0	2
Cucumbers	737	0			0.008 - 0.011	2.0	0.2
Grapes	741	5	0.7	0.013 - 0.14	0.008 - 0.013	4.0	1
Green Beans	720	1	0.1	0.013 ^	0.008 - 0.012	2.0	0.5
Lettuce	740	0			0.008 - 0.012	NT	0.5
Nectarines	345	48	13.9	0.003 - 0.20	0.002 - 0.008	2.0	2
Oranges	744	0			0.007 - 0.025	2.0	1
Peaches, Composite	536	222	41.4	0.010 - 0.35	0.006 ^	2.0	2
Peaches, Single Serving	534	218	40.8	0.010 - 0.65	0.006 ^	2.0	2
Pears, Canned	366	0			0.008 - 0.012	1.5	2
Pineapples	104	0			0.008 ^	NT	1
Potatoes	369	0			0.008 - 0.012	0.2	0.05
Strawberries, Fresh	518	0			0.008 - 0.025	2.0	1
Strawberries, Frozen	37	1	2.7	0.033 ^	0.008 - 0.025	2.0	1
Sweet Bell Peppers	738	3	0.4	0.013 - 0.021	0.008 - 0.012	0.3	1
Tomatoes, Canned	<u>369</u>	<u>3</u>	0.8	0.013 ^	0.008 - 0.025	2.0	1
Total	8647	742					
15 Benomyl (fungicide) (analyzed as Carbendazim)							
Cantaloupe	410	1	0.2	0.083 ^	0.050 ^	1.0	2
Cucumbers	367	1	0.3	0.083 ^	0.050 ^	1.0	0.5
Strawberries, Fresh	476	87	18.3	0.083 - 2.4	0.050 ^	5.0	-
Strawberries, Frozen	37	5	13.5	0.083 - 0.15	0.050 ^	5.0	-
Sweet Bell Peppers (X-1)	<u>360</u>	<u>5</u>	1.4	0.083 - 0.25	0.050 ^	0.2	-
Total	1650	99					
16 BHC alpha (insecticide)							
Cantaloupe	9	0			0.003 ^	0.05 ^{AL}	-
Cherries	199	0			0.001 ^	0.05 ^{AL}	-
Cucumbers	14	0			0.003 ^	0.05 ^{AL}	-
Grapes	18	0			0.003 ^	0.05 ^{AL}	-
Green Beans	18	0			0.003 ^	0.05 ^{AL}	-
Lettuce	18	0			0.003 ^	0.05 ^{AL}	-
Oranges	18	0			0.003 ^	0.05 ^{AL}	-
Peaches, Composite	536	0			0.001 ^	0.05 ^{AL}	-
Peaches, Single Serving	534	0			0.001 ^	0.05 ^{AL}	-
Pears, Canned	18	0			0.003 ^	0.05 ^{AL}	-
Strawberries, Fresh	9	0			0.003 ^	0.05 ^{AL}	-
Strawberries, Frozen	9	0			0.003 ^	0.05 ^{AL}	-
Sweet Bell Peppers	14	0			0.003 ^	0.05 ^{AL}	-
Tomatoes, Canned	<u>18</u>	<u>0</u>			0.003 ^	0.05 ^{AL}	-
Total	1432	0					
17 BHC beta (isomer of BHC alpha)							
Cantaloupe	9	0			0.003 ^	0.05 ^{AL}	-
Cherries	199	0			0.001 ^	0.05 ^{AL}	-
Cucumbers	14	0			0.003 ^	0.05 ^{AL}	-
Grapes	18	0			0.003 ^	0.05 ^{AL}	-
Green Beans	18	0			0.003 ^	0.05 ^{AL}	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Lettuce	18	0			0.003 ^	0.05 ^{AL}	-
Oranges	18	0			0.003 ^	0.05 ^{AL}	-
Peaches, Composite	527	0			0.001 ^	0.05 ^{AL}	-
Peaches, Single Serving	525	0			0.001 ^	0.05 ^{AL}	-
Pears, Canned	18	0			0.003 ^	0.05 ^{AL}	-
Strawberries, Fresh	9	0			0.003 ^	0.05 ^{AL}	-
Strawberries, Frozen	9	0			0.003 ^	0.05 ^{AL}	-
Sweet Bell Peppers	14	0			0.003 ^	0.05 ^{AL}	-
Tomatoes, Canned	18	0			0.003 ^	0.05 ^{AL}	-
Total	1414	0					
18 BHC delta (isomer of BHC alpha)							
Cantaloupe	9	0			0.003 ^	0.05 ^{AL}	-
Cucumbers	14	0			0.003 ^	0.05 ^{AL}	-
Grapes	18	0			0.003 ^	0.05 ^{AL}	-
Green Beans	18	0			0.003 ^	0.05 ^{AL}	-
Lettuce	18	0			0.003 ^	0.05 ^{AL}	-
Oranges	18	0			0.003 ^	0.05 ^{AL}	-
Pears, Canned	18	0			0.003 ^	0.05 ^{AL}	-
Strawberries, Fresh	9	0			0.003 ^	0.05 ^{AL}	-
Strawberries, Frozen	9	0			0.003 ^	0.05 ^{AL}	-
Sweet Bell Peppers	14	0			0.003 ^	0.05 ^{AL}	-
Tomatoes, Canned	18	0			0.003 ^	0.05 ^{AL}	-
Total	163	0					
19 Bifenthrin (insecticide)							
Cantaloupe	99	0			0.005 - 0.010	0.4	-
Carrots	184	0			0.003 - 0.010	NT	-
Cherries	275	0			0.005 - 0.010	NT	-
Cucumbers	211	0			0.005 - 0.010	0.4	-
Grapes	142	0			0.005 - 0.010	0.2	-
Green Beans	209	7	3.3	0.008 - 0.022	0.005 - 0.010	0.05	-
Lettuce	216	0			0.005 - 0.010	3.0	-
Nectarines	96	0			0.010 ^	NT	-
Oranges	179	0			0.005 - 0.010	0.05	0.05
Peaches, Composite	536	0			0.006 ^	NT	-
Peaches, Single Serving	534	0			0.006 ^	NT	-
Pears, Canned	106	0			0.005 ^	NT	0.5
Pineapples	104	0			0.010 ^	NT	-
Potatoes	106	0			0.010 ^	0.05	0.05
Strawberries, Fresh	518	24	4.6	0.008 - 0.34	0.005 - 0.025	3.00	1
Strawberries, Frozen	37	2	5.4	0.032 - 0.053	0.005 - 0.025	3.00	1
Sweet Bell Peppers	211	1	0.5	0.017 ^	0.005 - 0.010	0.5	-
Tomatoes, Canned	369	0			0.005 - 0.025	NT	-
Total	4132	34					
20 Bromacil (herbicide)							
Carrots	36	0			0.015 ^	NT	-
Cherries	58	0			0.015 ^	NT	-
Cucumbers	89	0			0.015 ^	NT	-
Grapes	34	0			0.015 ^	NT	-
Green Beans	85	0			0.015 ^	NT	-
Lettuce	90	0			0.015 ^	NT	-
Nectarines	96	0			0.015 ^	NT	-
Oranges	89	0			0.015 ^	0.1	-
Pineapples	364	0			0.015 - 0.029	0.1	-
Potatoes	36	0			0.015 ^	NT	-
Strawberries, Fresh	34	0			0.015 ^	NT	-
Strawberries, Frozen	1	0			0.015 ^	NT	-
Sweet Bell Peppers	107	0			0.015 ^	NT	-
Total	1119	0					

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
21 Captafol (fungicide) (parent of THPI)							
Cantaloupe	99	0			0.018 ^	NT	-
Carrots	54	0			0.018 ^	NT	-
Cherries	76	0			0.018 ^	NT	-
Cucumbers	211	0			0.018 ^	NT	-
Grapes	142	0			0.018 ^	NT	-
Green Beans	209	0			0.018 ^	NT	-
Lettuce	216	0			0.018 ^	NT	-
Nectarines	96	0			0.018 ^	NT	-
Oranges	708	0			0.006 - 0.033	NT	-
Pears, Canned	106	0			0.018 ^	NT	-
Pineapples	104	0			0.018 ^	NT	-
Potatoes	369	0			0.017 - 0.018	0.5	-
Strawberries, Fresh	518	0			0.018 - 0.030	NT	-
Strawberries, Frozen	37	0			0.018 - 0.030	NT	-
Sweet Bell Peppers	211	0			0.018 ^	NT	-
Tomatoes, Canned	369	0			0.018 - 0.033	15	-
Total	3525	0					
22 Captan (fungicide) (parent of THPI)							
Apples	184	25	13.6	0.020 - 1.1	0.012 ^	25.0	-
Cantaloupe	406	0			0.012 - 0.017	25	-
Carrots	184	0			0.012 - 0.019	2	-
Cherries	275	4	1.5	0.033 - 0.86	0.012 - 0.060	100	-
Cucumbers	737	1	0.1	0.062 ^	0.012 ^	25	-
Grapes	741	208	28.1	0.013 - 0.75	0.008 - 0.017	50.0	-
Green Beans	209	2	0.9	0.020 ^	0.012 ^	25	-
Lettuce	740	0			0.012 ^	100	-
Nectarines	345	17	4.9	0.007 - 0.14	0.004 - 0.012	50.0	-
Oranges	215	0			0.012 ^	NT	-
Peaches, Composite	536	53	9.9	0.033 - 1.8	0.006 - 0.020	50.0	20
Peaches, Single Serving	534	47	8.8	0.033 - 1.2	0.006 - 0.020	50.0	20
Pears, Canned	366	0			0.012 ^	25	-
Pineapples	104	0			0.012 ^	NT	-
Potatoes	369	0			0.012 ^	25.0	-
Strawberries, Fresh	518	316	61.0	0.020 - 7.6	0.012 - 0.017	25	-
Strawberries, Frozen	37	20	54.1	0.020 - 1.3	0.012 - 0.017	25	-
Sweet Bell Peppers	738	3	0.4	0.020 - 0.027	0.012 - 0.016	25	-
Tomatoes, Canned	369	0			0.012 - 0.017	25	-
Total	7607	696					
23 Carbaryl (insecticide)							
Apples	184	4	2.2	0.035 - 0.36	0.021 ^	10	5
Cantaloupe	406	5	1.2	0.017 - 0.10	0.008 - 0.010	10	3
Carrots	184	4	2.2	0.002 - 0.004	0.001 - 0.008	10	2
Cherries	275	117	42.5	0.010 - 3.0	0.006 - 0.008	10	10
Cucumbers	737	13	1.8	0.013 - 0.23	0.008 - 0.021	10	3
Grapes	741	29	3.9	0.013 - 0.96	0.008 - 0.010	10	5
Green Beans	719	33	4.6	0.006 - 0.75	0.002 - 0.008	10	5
Lettuce	740	0			0.008 ^	10	10
Nectarines	345	52	15.1	0.005 - 1.2	0.003 - 0.008	10	10
Oranges	744	15	2.0	0.005 - 0.028	0.003 - 0.008	10	7
Peaches, Composite	536	84	15.7	0.010 - 2.4	0.006 ^	10	10
Peaches, Single Serving	534	79	14.8	0.010 - 2.7	0.006 ^	10	10
Pears, Canned	366	1	0.3	0.013 ^	0.008 ^	10.0	5
Pineapples	364	4	1.1	0.017 - 0.043	0.008 - 0.010	2.0	-
Potatoes	369	0			0.008 ^	0.2	0.2
Strawberries, Fresh	518	89	17.2	0.013 - 4.4	0.008 - 0.010	10	7
Strawberries, Frozen	37	10	27.0	0.013 - 0.45	0.008 - 0.010	10	7
Sweet Bell Peppers	738	64	8.7	0.003 - 1.0	0.002 - 0.008	10	5
Tomatoes, Canned	369	0			0.003 - 0.010	10	5
Total	8906	603					

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
24 Carbofuran (insecticide) (parent of 3-Hydroxycarbofuran)							
Apples	184	0			0.031 ^	NT	-
Cantaloupe	406	1	0.2	0.025 ^	0.013 - 0.015	0.2	-
Carrots	184	0			0.002 - 0.013	NT	0.5
Cherries	275	0			0.010 - 0.013	NT	-
Cucumbers	737	0			0.013 - 0.031	0.2	-
Grapes	741	0			0.013 - 0.015	0.2	-
Green Beans	719	0			0.003 - 0.013	NT	-
Lettuce	740	0			0.008 - 0.013	NT	-
Nectarines	96	0			0.013 ^	NT	-
Oranges	215	0			0.013 ^	NT	-
Peaches, Composite	536	0			0.010 ^	NT	-
Peaches, Single Serving	534	0			0.010 ^	NT	-
Pears, Canned	366	0			0.008 - 0.013	NT	-
Pineapples	104	0			0.013 ^	NT	-
Potatoes	369	0			0.008 - 0.013	1	0.1
Strawberries, Fresh	518	0			0.013 - 0.017	0.2	-
Strawberries, Frozen	37	0			0.013 - 0.017	0.2	-
Sweet Bell Peppers	738	3	0.4	0.005 - 0.011	0.003 - 0.013	0.2	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.013 - 0.017	NT	0.1
Total	7868	4					
25 Carbophenothion (insecticide)							
Carrots	130	0			0.001 ^	NT	-
Cherries	199	0			0.003 ^	NT	-
Peaches, Composite	536	0			0.003 ^	NT	-
Peaches, Single Serving	<u>534</u>	<u>0</u>			0.003 ^	NT	-
Total	1399	0					
26 Chlordanes Total (insecticide)							
Cantaloupe	<u>286</u>	<u>0</u>			0.011 ^	0.1 ^{AL}	0.02
Total	286	0					
27 Chlordane cis (isomer of Chlordane)							
Cantaloupe	9	0			0.003 ^	0.1 ^{AL}	0.02
Carrots	130	3	2.3	0.002 ^	0.001 ^	0.1 ^{AL}	0.02
Cherries	199	0			0.002 ^	0.1 ^{AL}	0.02
Cucumbers	14	0			0.003 ^	0.1 ^{AL}	0.02
Grapes	18	0			0.003 ^	NT	0.02
Green Beans	18	0			0.003 ^	0.1 ^{AL}	0.02
Lettuce	18	0			0.003 ^	0.1 ^{AL}	0.02
Oranges	547	0			0.001 - 0.003	0.1 ^{AL}	0.02
Peaches, Composite	536	0			0.002 ^	0.1 ^{AL}	0.02
Peaches, Single Serving	534	0			0.002 ^	0.1 ^{AL}	0.02
Pears, Canned	18	0			0.003 ^	0.1 ^{AL}	0.02
Strawberries, Fresh	9	0			0.003 ^	0.1 ^{AL}	0.02
Strawberries, Frozen	9	0			0.003 ^	0.1 ^{AL}	0.02
Sweet Bell Peppers	14	0			0.003 ^	0.1 ^{AL}	0.02
Tomatoes, Canned	<u>280</u>	<u>0</u>			0.003 ^	0.1 ^{AL}	0.02
Total	2353	3					
28 Chlordane trans (isomer of Chlordane)							
Cantaloupe	9	0			0.003 ^	0.1 ^{AL}	0.02
Carrots	130	3	2.3	0.002 - 0.005	0.001 ^	0.1 ^{AL}	0.02
Cherries	199	0			0.002 ^	0.1 ^{AL}	0.02
Cucumbers	14	0			0.003 ^	0.1 ^{AL}	0.02
Grapes	18	0			0.003 ^	NT	0.02
Green Beans	18	0			0.003 ^	0.1 ^{AL}	0.02
Lettuce	18	0			0.003 ^	0.1 ^{AL}	0.02
Oranges	547	0			0.001 - 0.003	0.1 ^{AL}	0.02
Peaches, Composite	536	0			0.002 ^	0.1 ^{AL}	0.02

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Peaches, Single Serving	534	0			0.002 ^	0.1 ^{AL}	0.02
Pears, Canned	18	0			0.003 ^	0.1 ^{AL}	0.02
Strawberries, Fresh	9	0			0.003 ^	0.1 ^{AL}	0.02
Strawberries, Frozen	9	0			0.003 ^	0.1 ^{AL}	0.02
Sweet Bell Peppers	14	0			0.003 ^	0.1 ^{AL}	0.02
Tomatoes, Canned	<u>280</u>	<u>0</u>			0.003 ^	0.1 ^{AL}	0.02
Total	2353	3					
29 Chlorfenvinphos alpha (insecticide)							
Cherries	199	0			0.003 ^	NT	-
Peaches, Composite	536	0			0.003 ^	NT	-
Peaches, Single Serving	<u>534</u>	<u>0</u>			0.003 ^	NT	-
Total	1269	0					
30 Chlorfenvinphos beta (insecticide)							
Carrots	130	0			0.001 ^	NT	0.4
Cherries	199	0			0.003 ^	NT	-
Peaches, Composite	536	0			0.003 ^	NT	-
Peaches, Single Serving	<u>534</u>	<u>0</u>			0.003 ^	NT	-
Total	1399	0					
31 Chlorothalonil (fungicide)							
Apples	184	0			0.004 ^	NT	-
Cantaloupe	406	0			0.005 - 0.008	5	2
Carrots	54	0			0.005 ^	1	1
Cherries	76	0			0.005 ^	0.5	0.5
Cucumbers	737	69	9.4	0.007 - 0.47	0.004 - 0.005	5	5
Grapes	142	0			0.005 ^	NT	0.5
Green Beans	209	17	8.1	0.008 - 0.46	0.005 ^	5	5
Lettuce (V-2)	740	2	0.3	0.008 - 0.012	0.005 - 0.007	NT	-
Nectarines	345	0			0.001 - 0.005	0.5	-
Oranges	215	0			0.005 ^	NT	-
Pears, Canned	366	0			0.005 - 0.007	NT	-
Pineapples	104	0			0.005 ^	NT	-
Potatoes	369	0			0.005 - 0.007	0.1	0.2
Strawberries, Fresh	518	0			0.005 ^	NT	-
Strawberries, Frozen	37	0			0.005 ^	NT	-
Sweet Bell Peppers (V-2)	539	2	0.4	0.008 - 0.089	0.005 - 0.02	NT	7
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.005 ^	5	5
Total	5410	90					
32 Chlorpropham (herbicide, growth regulator)							
Apples	184	0			0.025 ^	NT	-
Cantaloupe	406	0			0.010 - 0.017	NT	-
Carrots	54	0			0.010 ^	NT	-
Cherries	275	0			0.006 - 0.010	NT	-
Cucumbers (V-1)	737	1	0.1	0.042 ^	0.010 - 0.025	NT	-
Grapes	142	0			0.010 ^	NT	-
Green Beans	720	0			0.010 - 0.020	NT	-
Lettuce	740	0			0.010 - 0.017	NT	-
Nectarines (V-1)	96	1	1.0	0.017 ^	0.010 ^	NT	-
Oranges	215	0			0.010 ^	NT	-
Peaches, Composite (V-3)	536	3	0.6	0.020 - 0.11	0.006 ^	NT	-
Peaches, Single Serving	534	3	0.6	0.010 - 0.098	0.006 ^	NT	-
Pears, Canned	366	0			0.010 - 0.017	NT	-
Pineapples	104	0			0.010 ^	NT	-
Potatoes	369	239	64.8	0.017 - 19	0.010 - 0.017	50	-
Strawberries, Fresh	518	0			0.010 - 0.025	NT	-
Strawberries, Frozen	37	0			0.010 - 0.025	NT	-
Sweet Bell Peppers (V-6)	738	6	0.8	0.017 - 0.052	0.010 - 0.020	NT	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.010 - 0.025	NT	-
Total	7140	253					

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
33 Chlorpyrifos (insecticide)							
Apples	184	22	11.9	0.007 - 0.089	0.004 ^	1.5	1
Cantaloupe	406	4	0.9	0.007 - 0.015	0.004 - 0.009	0.1	-
Carrots	184	0			0.002 - 0.004	0.1	0.1
Cherries	275	7	2.5	0.002 ^	0.001 - 0.004	1	-
Cucumbers	737	9	1.2	0.007 - 0.131	0.004 ^	0.1	-
Grapes	741	67	9.0	0.007 - 0.31	0.004 - 0.009	0.5	1
Green Beans	720	4	0.6	0.007 ^	0.004 ^	0.1	0.01
Lettuce	740	3	0.4	0.007 ^	0.004 ^	1.0	0.1
Nectarines	345	20	5.8	0.003 - 0.015	0.002 - 0.004	0.1	-
Oranges	744	8	1.1	0.003 - 0.009	0.002 - 0.008	1.0	2
Peaches, Composite	536	168	31.3	0.002 - 0.13	0.001 ^	0.1	-
Peaches, Single Serving	534	152	28.5	0.002 - 0.10	0.001 ^	0.1	-
Pears, Canned	366	0			0.004 ^	0.1	1
Pineapples	104	0			0.004 ^	0.1	-
Potatoes	369	1	0.3	0.032 ^	0.004 ^	0.1	0.05
Strawberries, Fresh	518	1	0.2	0.007 ^	0.004 - 0.008	0.2	-
Strawberries, Frozen	37	0			0.004 - 0.008	0.2	-
Sweet Bell Peppers	738	107	14.5	0.007 - 0.30	0.004 ^	1.0	0.5
Tomatoes, Canned	369	0			0.004 - 0.008	0.5	0.5
Total	8647	573					
34 Coumaphos (insecticide)							
Carrots	130	0			0.001 ^	NT	-
Cherries	199	0			0.005 ^	NT	-
Peaches, Composite	536	0			0.005 ^	NT	-
Peaches, Single Serving	534	0			0.005 ^	NT	-
Total	1399	0					
35 Coumaphos oxygen analog (metabolite of Coumaphos)							
Carrots	130	0			0.004 ^	NT	-
Cherries	199	0			0.008 ^	NT	-
Peaches, Composite	536	0			0.008 ^	NT	-
Peaches, Single Serving	534	0			0.008 ^	NT	-
Total	1399	0					
36 Cyfluthrin (insecticide)							
Cantaloupe	90	0			0.060 ^	0.05	-
Carrots	184	0			0.025 - 0.060	0.20	-
Cherries	275	0			0.025 - 0.060	0.05	-
Cucumbers	161	0			0.060 ^	0.05	-
Grapes	70	0			0.060 ^	0.05	-
Green Beans	156	0			0.060 ^	0.05	-
Lettuce	162	0			0.060 ^	0.05	-
Nectarines	96	0			0.060 ^	0.05	-
Oranges	690	0			0.039 - 0.060	0.2	-
Peaches, Composite	536	0			0.025 ^	0.05	-
Peaches, Single Serving	534	0			0.025 ^	0.05	-
Pears, Canned	36	0			0.060 ^	0.05	-
Pineapples	104	0			0.060 ^	0.05	-
Potatoes	369	0			0.030 - 0.06	0.05	-
Strawberries, Fresh	106	0			0.060 ^	NT	-
Strawberries, Frozen	1	0			0.060 ^	NT	-
Sweet Bell Peppers	161	0			0.060 ^	0.50	0.2
Tomatoes, Canned	163	0			0.045 - 0.060	0.20	0.5
Total	3894	0					
37 Cymoxanil (fungicide)							
Potatoes	35	0			0.20 ^	0.05	-
Total	35	0					
38 Cypermethrin (insecticide)							
Apples	184	0			0.045 ^	NT	2
Carrots	130	0			0.023 ^	NT	0.05

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Cherries	199	0			0.040 ^	NT	1
Cucumbers	526	0			0.045 ^	NT	0.2
Peaches, Composite	527	0			0.040 - 0.07	NT	2
Peaches, Single Serving	525	0			0.040 - 0.07	NT	2
Strawberries, Fresh	387	0			0.050 ^	NT	-
Strawberries, Frozen	7	0			0.050 ^	NT	-
Tomatoes, Canned	<u>262</u>	<u>0</u>			0.050 ^	NT	0.5
Total	2747	0					
39 Cyprodinil (fungicide)							
Apples	<u>184</u>	<u>0</u>			0.025 ^	0.1	-
Total	184	0					
40 DCPA (herbicide)							
Apples	184	0			0.005 ^	NT	-
Cantaloupe	406	0			0.006 ^	1	-
Carrots	184	0			0.001 - 0.006	NT	-
Cherries	275	0			0.001 - 0.006	NT	-
Cucumbers	737	1	0.1	0.010 ^	0.005 - 0.006	1	-
Grapes	142	0			0.006 ^	NT	-
Green Beans	252	3	1.2	0.010 - 0.048	0.006 - 0.007	2	-
Lettuce	740	16	2.2	0.010 - 0.034	0.006 - 0.007	2	-
Nectarines	96	0			0.006 ^	NT	-
Oranges	215	0			0.006 ^	NT	-
Peaches, Composite	536	0			0.001 ^	NT	-
Peaches, Single Serving	534	0			0.001 ^	NT	-
Pears, Canned	366	0			0.006 - 0.007	NT	-
Pineapples	104	0			0.006 ^	NT	-
Potatoes	369	0			0.006 - 0.007	2	-
Strawberries, Fresh	518	0			0.005 - 0.006	2	-
Strawberries, Frozen	37	0			0.005 - 0.006	2	-
Sweet Bell Peppers	738	0			0.006 - 0.007	2	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.005 - 0.006	1	-
Total	6802	20					
41 DDD o,p' (metabolite of DDT)							
Carrots	130	1	0.8	0.002 ^	0.001 ^	3 ^{AL}	0.2
Cherries	199	0			0.001 ^	0.2 ^{AL}	-
Peaches, Composite	518	0			0.001 ^	0.2 ^{AL}	-
Peaches, Single Serving	<u>516</u>	<u>0</u>			0.001 ^	0.2 ^{AL}	-
Total	1363	1					
42 DDD p,p' (metabolite of DDT)							
Apples	184	0			0.006 ^	0.1 ^{AL}	-
Cantaloupe	120	0			0.008 ^	0.1 ^{AL}	-
Carrots	184	3	1.6	0.002 ^	0.001 - 0.008	3 ^{AL}	0.2
Cherries	275	0			0.001 - 0.008	0.2 ^{AL}	-
Cucumbers	737	0			0.006 - 0.008	0.1 ^{AL}	-
Grapes	142	0			0.008 ^	0.05 ^{AL}	-
Green Beans	209	0			0.008 ^	0.2 ^{AL}	-
Lettuce	216	0			0.008 ^	0.5 ^{AL}	-
Nectarines	96	0			0.008 ^	0.2 ^{AL}	-
Oranges	744	0			0.001 - 0.010	0.1 ^{AL}	-
Peaches, Composite	536	0			0.001 ^	0.2 ^{AL}	-
Peaches, Single Serving	534	0			0.001 ^	0.2 ^{AL}	-
Pears, Canned	106	0			0.008 ^	0.1 ^{AL}	-
Pineapples	104	0			0.008 ^	0.2 ^{AL}	-
Potatoes	106	0			0.008 ^	1 ^{AL}	-
Strawberries, Fresh	518	0			0.008 - 0.010	0.1 ^{AL}	-
Strawberries, Frozen	37	0			0.008 - 0.010	0.1 ^{AL}	-
Sweet Bell Peppers	211	0			0.008 ^	0.1 ^{AL}	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.008 - 0.010	0.05 ^{AL}	-
Total	5428	0					
43 DDE o,p' (metabolite of DDT)							
Cherries	181	0			0.003 [^]	0.2 ^{AL}	-
Peaches, Composite	238	0			0.001 - 0.003	0.2 ^{AL}	-
Peaches, Single Serving	<u>238</u>	<u>0</u>			0.001 - 0.003	0.2 ^{AL}	-
Total	657	0					
44 DDE p,p' (metabolite of DDT)							
Apples	184	0			0.003 [^]	0.1 ^{AL}	-
Cantaloupe	406	0			0.006 - 0.007	0.1 ^{AL}	-
Carrots	184	41	22.3	0.003 - 0.063	0.002 - 0.007	3 ^{AL}	0.2
Cherries	275	0			0.002 - 0.007	0.2 ^{AL}	-
Cucumbers	737	5	0.7	0.005 [^]	0.003 - 0.007	0.1 ^{AL}	-
Grapes	741	0			0.006 - 0.007	0.05 ^{AL}	-
Green Beans	720	2	0.3	0.010 - 0.025	0.006 - 0.007	0.2 ^{AL}	-
Lettuce	740	9	1.2	0.012 - 0.018	0.007 [^]	0.5 ^{AL}	-
Nectarines	345	0			0.001 - 0.007	0.2 ^{AL}	-
Oranges	744	0			0.001 - 0.010	0.1 ^{AL}	-
Peaches, Composite	536	1	0.2	0.003 [^]	0.002 [^]	0.2 ^{AL}	-
Peaches, Single Serving	534	1	0.2	0.003 [^]	0.002 [^]	0.2 ^{AL}	-
Pears, Canned	366	0			0.007 [^]	0.1 ^{AL}	-
Pineapples	364	0			0.006 - 0.007	0.2 ^{AL}	-
Potatoes	369	9	2.4	0.012 - 0.024	0.007 [^]	1 ^{AL}	-
Strawberries, Fresh	518	0			0.007 - 0.010	0.1 ^{AL}	-
Strawberries, Frozen	37	0			0.007 - 0.010	0.1 ^{AL}	-
Sweet Bell Peppers	738	3	0.4	0.010 - 0.012	0.006 - 0.007	0.1 ^{AL}	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.007 - 0.010	0.05 ^{AL}	-
Total	8907	71					
45 DDT o,p' (insecticide)							
Apples	184	0			0.005 [^]	0.1 ^{AL}	-
Carrots	130	9	6.9	0.002 [^]	0.001 [^]	3 ^{AL}	0.2
Cherries	199	0			0.001 [^]	0.2 ^{AL}	-
Cucumbers	526	5	0.9	0.008 [^]	0.005 [^]	0.1 ^{AL}	-
Peaches, Composite	536	0			0.001 [^]	0.2 ^{AL}	-
Peaches, Single Serving	<u>534</u>	<u>0</u>			0.001 [^]	0.2 ^{AL}	-
Total	2109	14					
46 DDT p,p' (insecticide)							
Apples	184	0			0.005 [^]	0.1 ^{AL}	-
Cantaloupe	120	0			0.008 [^]	0.1 ^{AL}	-
Carrots	184	13	7.1	0.003 - 0.010	0.002 - 0.008	3 ^{AL}	0.2
Cherries	275	0			0.001 - 0.008	0.2 ^{AL}	-
Cucumbers	737	0			0.005 - 0.008	0.1 ^{AL}	-
Grapes	142	0			0.008 [^]	0.05 ^{AL}	-
Green Beans	209	0			0.008 [^]	0.2 ^{AL}	-
Lettuce	216	0			0.008 [^]	0.5 ^{AL}	-
Nectarines	96	0			0.008 [^]	0.2 ^{AL}	-
Oranges	744	0			0.003 - 0.010	0.1 ^{AL}	-
Peaches, Composite	536	0			0.001 [^]	0.2 ^{AL}	-
Peaches, Single Serving	534	0			0.001 [^]	0.2 ^{AL}	-
Pears, Canned	106	0			0.008 [^]	0.1 ^{AL}	-
Pineapples	104	0			0.008 [^]	0.2 ^{AL}	-
Potatoes	106	1	0.9	0.013 [^]	0.008 [^]	1 ^{AL}	-
Strawberries, Fresh	518	0			0.008 - 0.010	0.1 ^{AL}	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Strawberries, Frozen	37	0			0.008 - 0.010	0.1 ^{AL}	-
Sweet Bell Peppers	211	0			0.008 [^]	0.1 ^{AL}	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.008 - 0.010	0.05 ^{AL}	-
Total	5428	14					
47 DEF-Tribufos (herbicide)							
Carrots	130	0			0.001 [^]	NT	-
Cherries	199	0			0.002 [^]	NT	-
Peaches, Composite	536	0			0.002 [^]	NT	-
Peaches, Single Serving	<u>534</u>	<u>0</u>			0.002 [^]	NT	-
Total	1399	0					
48 Deltamethrin (insecticide)							
Carrots	<u>130</u>	<u>0</u>			0.019 [^]	0.05	0.01
Total	130	0					
49 Demeton-S sulfone (insecticide) (metabolite of Demeton-S)							
Carrots	130	0			0.003 [^]	NT	-
Cherries	199	0			0.003 [^]	NT	-
Peaches, Composite	536	0			0.003 [^]	NT	-
Peaches, Single Serving	<u>534</u>	<u>0</u>			0.003 [^]	NT	-
Total	1399	0					
50 Desmedipham (herbicide)							
Carrots	<u>130</u>	<u>0</u>			0.026 [^]	NT	-
Total	130	0					
51 Diazinon (insecticide)							
Apples	184	0			0.005 [^]	0.5	-
Cantaloupe	406	2	0.5	0.013 - 0.018	0.002 - 0.011	0.75	0.2
Carrots	184	11	5.9	0.007 - 0.039	0.002 [^]	0.75	0.5
Cherries	275	2	0.7	0.003 - 0.013	0.002 - 0.004	0.75	1
Cucumbers	737	5	0.7	0.015 - 0.083	0.002 - 0.005	0.75	0.1
Grapes	741	9	1.2	0.003 - 0.064	0.002 - 0.011	0.75	-
Green Beans	720	0			0.002 [^]	0.5	0.2
Lettuce	740	18	2.4	0.003 - 0.021	0.002 - 0.007	0.7	0.5
Nectarines	345	0			0.002 [^]	0.5	-
Oranges	744	0			0.002 - 0.010	0.7	-
Peaches, Composite	536	32	5.9	0.007 - 0.16	0.004 [^]	0.7	0.2
Peaches, Single Serving	534	29	5.4	0.007 - 0.23	0.004 [^]	0.7	0.2
Pears, Canned	366	0			0.002 - 0.007	0.5	-
Pineapples	364	0			0.002 - 0.011	0.5	0.1
Potatoes	369	1	0.3	0.003 [^]	0.002 - 0.007	0.1	0.01
Strawberries, Fresh	518	0			0.002 - 0.010	0.5	0.1
Strawberries, Frozen	37	0			0.002 - 0.010	0.5	0.1
Sweet Bell Peppers	738	13	1.8	0.003 - 0.031	0.002 [^]	0.5	0.05
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.002 - 0.010	0.75	0.5
Total	8907	122					
52 Diazinon oxygen analog (metabolite of Diazinon)							
Apples	184	0			0.025 [^]	NT	-
Cantaloupe	99	0			0.003 [^]	NT	-
Carrots	184	0			0.002 - 0.003	NT	-
Cherries	275	0			0.003 [^]	NT	-
Cucumbers	211	0			0.003 [^]	NT	-
Grapes	741	0			0.003 - 0.018	NT	-
Green Beans	720	0			0.002 - 0.003	NT	-
Lettuce	216	0			0.003 [^]	NT	-
Nectarines	345	0			0.003 - 0.005	NT	-
Oranges	685	0			0.001 - 0.005	NT	-
Peaches, Composite	536	0			0.003 [^]	NT	-
Peaches, Single Serving	534	0			0.003 [^]	NT	-
Pears, Canned	106	0			0.003 [^]	NT	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Pineapples	364	0			0.003 - 0.018	NT	-
Potatoes	369	0			0.003 - 0.016	NT	-
Strawberries, Fresh	131	0			0.003 ^	NT	-
Strawberries, Frozen	30	0			0.003 ^	NT	-
Sweet Bell Peppers	738	0			0.002 - 0.003	NT	-
Tomatoes, Canned	107	0			0.003 ^	NT	-
Total	6575	0					
53 Dichlobenil (herbicide)							
Apples	184	0			0.025 ^	0.15	-
Carrots	130	0			0.013 ^	NT	-
Total	314	0					
54 Dichlorvos-DDVP (insecticide) (also a metabolite of Naled)							
Apples	184	0			0.013 ^	0.5	-
Cantaloupe	406	0			0.002 ^	0.5	-
Carrots	184	0			0.002 ^	0.5	-
Cherries	275	0			0.002 ^	0.5	-
Cucumbers	737	0			0.002 - 0.013	0.5	-
Grapes	741	0			0.002 ^	0.5	-
Green Beans	720	1	0.1	0.007 ^	0.002 - 0.004	0.5	-
Lettuce	740	0			0.002 - 0.003	0.5	-
Nectarines	96	0			0.002 ^	0.5	-
Oranges	744	0			0.001 - 0.033	0.5	-
Peaches, Composite	509	0			0.002 ^	0.5	-
Peaches, Single Serving	509	0			0.002 ^	0.5	-
Pears, Canned	366	0			0.002 - 0.003	0.5	-
Pineapples	104	0			0.002 ^	0.5	-
Potatoes	369	0			0.002 - 0.003	0.5	-
Strawberries, Fresh	518	4	0.8	0.028 - 0.12	0.002 - 0.017	0.5	-
Strawberries, Frozen	37	3	8.1	0.003 - 0.007	0.002 - 0.017	0.5	-
Sweet Bell Peppers	738	3	0.4	0.003 - 0.007	0.002 - 0.004	0.5	-
Tomatoes, Canned	369	0			0.002 - 0.033	0.5	-
Total	8346	11					
55 Dicloran (fungicide)							
Apples (V-2)	184	2	1.1	0.005 ^	0.003 ^	NT	-
Cantaloupe	406	0			0.008 - 0.009	NT	-
Carrots	184	0			0.002 - 0.008	10	-
Cherries	275	0			0.002 - 0.008	20	-
Cucumbers	737	5	0.7	0.005 - 0.013	0.003 - 0.008	5	-
Grapes	741	20	2.7	0.015 - 0.52	0.008 - 0.009	10	10
Green Beans	720	28	3.9	0.013 - 5.6	0.008 ^	20	-
Lettuce	740	1	0.1	0.013 ^	0.008 - 0.010	10	10
Nectarines	345	108	31.3	0.003 - 1.1	0.002 - 0.008	20	-
Oranges	215	0			0.008 ^	NT	-
Peaches, Composite	536	85	15.9	0.003 - 2.5	0.002 ^	20	15
Peaches, Single Serving	534	82	15.4	0.003 - 1.9	0.002 ^	20	15
Pears, Canned	366	0			0.008 - 0.010	NT	-
Pineapples	104	0			0.008 ^	NT	-
Potatoes	369	3	0.8	0.017 ^	0.008 - 0.010	0.25	-
Strawberries, Fresh	518	0			0.008 ^	NT	10
Strawberries, Frozen	37	0			0.008 ^	NT	10
Sweet Bell Peppers (V-1)	738	1	0.1	0.013 ^	0.008 ^	NT	-
Tomatoes, Canned	369	0			0.008 ^	5	0.5
Total	8118	335					
56 Dicofol o,p' (insecticide)							
Carrots	130	0			0.003 ^	NT	-
Peaches, Composite	15	15	100	0.007 - 0.078	0.004 ^	10	5
Peaches, Single Serving	14	14	100	0.007 - 0.094	0.004 ^	10	5
Sweet Bell Peppers	6	6	100	0.023 - 0.058	0.015 ^	5	1
Total	165	35					

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
57 Dicofol p,p' (isomer of Dicofol o,p')							
Apples	184	2	1.1	0.14 - 0.22	0.028 ^	5	-
Cantaloupe	406	16	3.9	0.017 - 0.041	0.010 - 0.015	5	0.2
Carrots	184	0			0.003 - 0.010	NT	-
Cherries	275	0			0.003 - 0.010	5	5
Cucumbers	737	3	0.4	0.017 - 0.078	0.010 - 0.028	5	0.5
Grapes	741	10	1.3	0.017 - 0.79	0.010 - 0.015	5	5
Green Beans	720	2	0.3	0.017 ^	0.010 - 0.015	5	2
Lettuce	740	0			0.010 - 0.018	NT	-
Nectarines	345	13	3.8	0.017 - 0.55	0.010 - 0.013	10	-
Oranges	744	1	0.1	0.017 ^	0.010 - 0.033	10	5
Peaches, Composite	527	22	4.2	0.005 - 0.45	0.003 ^	10	5
Peaches, Single Serving	525	23	4.4	0.005 - 0.45	0.003 ^	10	5
Pears, Canned	366	0			0.010 - 0.018	5	-
Pineapples	104	0			0.010 ^	NT	-
Potatoes	369	0			0.010 - 0.018	NT	-
Strawberries, Fresh	518	8	1.5	0.017 - 1.5	0.010 - 0.033	5	-
Strawberries, Frozen	37	3	8.1	0.017 - 0.17	0.010 - 0.033	5	-
Sweet Bell Peppers	738	62	8.4	0.017 - 1.21	0.010 - 0.015	5	1
Tomatoes, Canned	369	0			0.010 - 0.033	5	1
Total	8629	165					
58 Dieldrin (insecticide) (also a metabolite of Aldrin)							
Apples	184	0			0.002 ^	0.03 ^{AL}	0.05
Cantaloupe	406	18	4.4	0.005 - 0.056	0.003 - 0.006	0.1 ^{AL}	0.1
Carrots	184	5	2.7	0.008 - 0.027	0.005 - 0.006	0.1 ^{AL}	0.1
Cherries	275	0			0.003 - 0.006	0.3 ^{AL}	-
Cucumbers	737	120	16.3	0.003 - 0.085	0.002 - 0.006	0.1 ^{AL}	0.1
Grapes	142	0			0.006 ^	NT	-
Green Beans	720	0			0.006 - 0.008	0.05 ^{AL}	0.05
Lettuce	740	0			0.006 - 0.018	0.03 ^{AL}	0.05
Nectarines	96	0			0.006 ^	0.3 ^{AL}	-
Oranges	215	0			0.003 - 0.006	0.02 ^{AL}	0.05
Peaches, Composite	536	0			0.002 - 0.004	0.02 ^{AL}	-
Peaches, Single Serving	534	0			0.002 - 0.004	0.02 ^{AL}	-
Pears, Canned	366	0			0.006 - 0.018	0.03 ^{AL}	0.05
Pineapples	364	0			0.005 - 0.006	0.03 ^{AL}	-
Potatoes	369	2	0.5	0.010 ^	0.006 - 0.018	0.1 ^{AL}	0.1
Strawberries, Fresh	518	0			0.003 - 0.006	0.05 ^{AL}	-
Strawberries, Frozen	37	0			0.003 - 0.006	0.05 ^{AL}	-
Sweet Bell Peppers	738	0			0.003 - 0.008	0.05 ^{AL}	0.1
Tomatoes, Canned	369	0			0.003 - 0.006	0.05 ^{AL}	0.1
Total	7530	145					
59 Dimethoate (insecticide) (parent of Omethoate)							
Apples	184	4	2.2	0.008 - 0.059	0.005 ^	2	1
Cantaloupe	406	2	0.5	0.003 - 0.009	0.002 - 0.009	1	-
Carrots	184	0			0.001 - 0.002	NT	1
Cherries	275	9	3.3	0.003 - 0.13	0.002 - 0.003	2	2
Cucumbers (V-7)	737	7	0.9	0.003 - 0.30	0.002 - 0.005	NT	-
Grapes	741	88	11.9	0.003 - 0.96	0.002 - 0.009	1	-
Green Beans	720	61	8.5	0.003 - 0.80	0.002 ^	2	-
Lettuce	740	57	7.7	0.003 - 0.12	0.002 - 0.007	2	-
Nectarines	96	0			0.002 ^	NT	-
Oranges	744	1	0.1	0.002 ^	0.001 - 0.010	2	2
Peaches, Composite (V-2)	536	2	0.4	0.005 ^	0.003 ^	NT	2
Peaches, Single Serving	534	1	0.2	0.005 ^	0.003 ^	NT	2
Pears, Canned	366	0			0.002 - 0.007	2	1
Pineapples	104	0			0.002 ^	NT	-
Potatoes	369	0			0.002 - 0.007	0.2	0.05

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Strawberries, Fresh (V-1)	518	1	0.2	0.003 ^	0.002 - 0.010	NT	1
Strawberries, Frozen	37	0			0.002 - 0.010	NT	1
Sweet Bell Peppers	738	51	6.9	0.003 - 0.85	0.002 ^	2	1
Tomatoes, Canned	<u>369</u>	<u>1</u>	0.3	0.003 ^	0.002 - 0.010	2	-
Total	8398	285					
60 Dimethomorph (fungicide)							
Potatoes	<u>351</u>	<u>0</u>			0.016 - 0.030	0.05	-
Total	351	0					
61 Diphenamid (herbicide)							
Apples	184	0			0.025 ^	0.1	-
Carrots	130	0			0.007 ^	NT	-
Lettuce	524	0			0.018 ^	NT	-
Pears, Canned	260	0			0.018 ^	NT	-
Potatoes	369	0			0.006 - 0.018	1	-
Strawberries, Fresh	387	0			0.17 ^	1	-
Strawberries, Frozen	7	0			0.17 ^	1	-
Tomatoes, Canned	<u>262</u>	<u>0</u>			0.17 ^	0.1	-
Total	2123	0					
62 Diphenylamine-DPA (fungicide)							
Apples	184	61	33.2	0.042 - 2.1	0.025 ^	10	5
Cantaloupe	143	0			0.010 - 0.030	NT	-
Carrots	184	0			0.003 - 0.010	NT	-
Cherries	275	0			0.010 - 0.015	NT	-
Cucumbers	737	0			0.010 - 0.025	NT	-
Grapes (V-1)	142	1	0.7	0.017 ^	0.010 ^	NT	-
Green Beans	720	0			0.008 - 0.010	NT	-
Lettuce	740	0			0.008 - 0.010	NT	-
Nectarines	96	0			0.010 ^	NT	-
Oranges	215	0			0.010 ^	NT	-
Peaches, Composite (V-15)	536	15	2.8	0.025 - 0.26	0.015 ^	NT	-
Peaches, Single Serving	534	11	2.1	0.025 - 0.19	0.015 ^	NT	-
Pears, Canned	366	5	1.4	0.013 - 0.017	0.008 - 0.010	10	-
Pineapples	104	0			0.010 ^	NT	-
Potatoes	369	0			0.008 - 0.010	NT	-
Strawberries, Fresh	518	0			0.010 - 0.17	NT	-
Strawberries, Frozen	37	0			0.010 - 0.17	NT	-
Sweet Bell Peppers (V-1)	738	1	0.1	0.017 ^	0.008 - 0.010	NT	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.010 - 0.17	NT	-
Total	7007	94					
63 Disulfoton (insecticide)							
Apples	184	0			0.013 ^	NT	-
Cantaloupe	406	0			0.003 - 0.010	NT	0.5
Carrots	184	0			0.002 - 0.003	NT	0.5
Cherries	275	0			0.003 ^	NT	-
Cucumbers	737	0			0.003 - 0.013	NT	0.5
Grapes	142	0			0.003 ^	NT	-
Green Beans	720	0			0.002 - 0.003	0.75	0.5
Lettuce	740	0			0.003 - 0.007	0.75	0.5
Nectarines	96	0			0.003 ^	NT	-
Oranges	215	0			0.003 ^	NT	-
Peaches, Composite	536	0			0.003 ^	NT	-
Peaches, Single Serving	534	0			0.003 ^	NT	-
Pears, Canned	366	0			0.003 - 0.007	NT	-
Pineapples	364	0			0.003 - 0.010	0.75	0.1
Potatoes	369	0			0.003 - 0.007	0.75	0.5
Strawberries, Fresh	518	0			0.003 - 0.008	NT	-
Strawberries, Frozen	37	0			0.003 - 0.008	NT	-
Sweet Bell Peppers	738	0			0.002 - 0.003	0.1	0.5
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.003 - 0.008	0.75	0.5
Total	7530	0					

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
64 Disulfoton sulfone (metabolite of Disulfoton)							
Apples	184	0			0.008 ^	NT	-
Cantaloupe	406	0			0.004 - 0.010	NT	0.5
Carrots	184	0			0.001 - 0.004	NT	0.5
Cherries	275	0			0.004 - 0.005	NT	-
Cucumbers	737	0			0.004 - 0.008	NT	0.5
Grapes	142	0			0.004 ^	NT	-
Green Beans	720	0			0.004 ^	0.75	0.5
Lettuce	740	1	0.1	0.015 ^	0.004 - 0.009	0.75	0.5
Nectarines	96	0			0.004 ^	NT	-
Oranges	215	0			0.004 ^	NT	-
Peaches, Composite	536	0			0.005 ^	NT	-
Peaches, Single Serving	534	0			0.005 ^	NT	-
Pears, Canned	366	0			0.004 - 0.012	NT	-
Pineapples	364	0			0.004 - 0.010	0.75	0.1
Potatoes	369	0			0.004 - 0.009	NT	0.5
Strawberries, Fresh	518	0			0.004 - 0.008	NT	-
Strawberries, Frozen	37	0			0.004 - 0.008	NT	-
Sweet Bell Peppers	738	1	0.1	0.007 ^	0.004 ^	0.1	0.5
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.004 - 0.008	0.75	0.5
Total	7530	2					
65 Diuron (herbicide)							
Peaches, Composite	9	0			0.030 ^	0.1	-
Peaches, Single Serving	<u>9</u>	<u>0</u>			0.030 ^	0.1	-
Total	18	0					
66 Endosulfan I (insecticide)							
Apples	184	3	1.6	0.007 - 0.029	0.004 ^	2.0	1
Cantaloupe	406	2	0.5	0.007 ^	0.004 - 0.005	2.0	2
Carrots	184	0			0.005 - 0.006	0.2	0.2
Cherries	275	4	1.5	0.008 - 0.041	0.005 - 0.006	2.0	1
Cucumbers	737	322	43.7	0.007 - 0.15	0.004 - 0.005	2.0	2
Grapes	741	0			0.004 - 0.005	2.0	2
Green Beans	720	139	19.3	0.008 - 0.58	0.005 - 0.006	2.0	0.5
Lettuce	740	16	2.2	0.008 - 0.41	0.005 - 0.007	2.0	1
Nectarines	345	4	1.2	0.002 - 0.075	0.001 - 0.005	2.0	2
Oranges	215	0			0.005 ^	NT	2
Peaches, Composite	536	9	1.7	0.007 - 0.12	0.002 - 0.006	2.0	2
Peaches, Single Serving	534	10	1.9	0.010 - 0.27	0.002 - 0.006	2.0	2
Pears, Canned	366	0			0.005 - 0.007	2.0	1
Pineapples	364	0			0.004 - 0.005	2.0	2
Potatoes	369	0			0.005 - 0.007	0.2	0.2
Strawberries, Fresh	518	5	0.9	0.008 - 0.020	0.005 ^	2.0	2
Strawberries, Frozen	37	0			0.005 ^	2.0	2
Sweet Bell Peppers	738	107	14.5	0.008 - 1.1	0.005 - 0.006	2.0	2
Tomatoes, Canned	<u>369</u>	<u>2</u>	0.5	0.008 ^	0.005 ^	2.0	2
Total	8378	623					
67 Endosulfan II (metabolite of Endosulfan)							
Apples	184	4	2.2	0.007 - 0.049	0.004 ^	2.0	1
Cantaloupe	406	1	0.2	0.007 ^	0.004 - 0.006	2.0	2
Carrots	184	0			0.006 ^	0.2	0.2
Cherries	275	12	4.4	0.010 - 0.13	0.006 - 0.008	2.0	1
Cucumbers	737	261	35.4	0.007 - 0.090	0.004 - 0.006	2.0	2
Grapes	741	1	0.1	0.007 ^	0.004 - 0.006	2.0	2
Green Beans	720	93	12.9	0.010 - 0.50	0.006 ^	2.0	0.5
Lettuce	740	8	1.1	0.010 - 0.35	0.006 - 0.007	2.0	1
Nectarines	345	12	3.5	0.002 - 0.15	0.001 - 0.006	2.0	2
Oranges	215	0			0.006 ^	NT	2
Peaches, Composite	536	17	3.2	0.013 - 0.23	0.003 - 0.008	2.0	2
Peaches, Single Serving	534	18	3.4	0.013 - 0.24	0.003 - 0.008	2.0	2
Pears, Canned	366	0			0.006 - 0.007	2.0	1

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Pineapples	364	0			0.004 - 0.006	2.0	2
Potatoes	369	0			0.006 - 0.007	0.2	0.2
Strawberries, Fresh	518	12	2.3	0.010 - 0.043	0.006 - 0.008	2.0	2
Strawberries, Frozen	37	1	2.7	0.010 ^	0.006 - 0.008	2.0	2
Sweet Bell Peppers	738	127	17.2	0.010 - 1.6	0.006 ^	2.0	2
Tomatoes, Canned	369	0			0.006 - 0.008	2.0	2
Total	8378	567					
68 Endosulfan sulfate (metabolite of Endosulfan)							
Apples	184	4	2.2	0.008 ^	0.005 ^	2.0	1
Cantaloupe	406	169	41.6	0.008 - 0.068	0.005 - 0.007	2.0	2
Carrots	184	1	0.5	0.012 ^	0.007 - 0.010	0.2	0.2
Cherries	275	23	8.4	0.012 - 0.078	0.007 - 0.010	2.0	1
Cucumbers	737	408	55.4	0.008 - 0.096	0.005 - 0.007	2.0	2
Grapes	741	0			0.005 - 0.007	2.0	2
Green Beans	720	191	26.5	0.012 - 0.48	0.007 - 0.010	2.0	0.5
Lettuce	740	52	7.0	0.012 - 0.48	0.007 ^	2.0	1
Nectarines	345	13	3.8	0.002 - 0.054	0.001 - 0.007	2.0	2
Oranges	215	0			0.007 ^	NT	2
Peaches, Composite	536	28	5.2	0.017 - 0.085	0.003 - 0.010	2.0	2
Peaches, Single Serving	534	23	4.3	0.017 - 0.077	0.003 - 0.010	2.0	2
Pears, Canned	366	0			0.007 ^	2.0	1
Pineapples	364	0			0.005 - 0.007	2.0	2
Potatoes	369	15	4.1	0.012 - 0.078	0.007 ^	0.2	0.2
Strawberries, Fresh	518	17	3.3	0.012 - 0.037	0.007 - 0.008	2.0	2
Strawberries, Frozen	37	1	2.7	0.012 ^	0.007 - 0.008	2.0	2
Sweet Bell Peppers	738	103	13.9	0.012 - 0.45	0.007 - 0.010	2.0	2
Tomatoes, Canned	369	0			0.007 - 0.008	2.0	2
Total	8378	1048					
69 Endrin (insecticide)							
Strawberries, Fresh	387	0			0.003 ^	NT	-
Strawberries, Frozen	7	0			0.003 ^	NT	-
Tomatoes, Canned	262	0			0.003 ^	0.05	0.05
Total	656	0					
70 EPTC (herbicide)							
Carrots	130	0			0.065 ^	0.1	-
Total	130	0					
71 Esfenvalerate (insecticide) (isomer of Fenvalerate)							
Cantaloupe	406	0			0.038 - 0.098	0.05	-
Carrots	184	0			0.003 - 0.038	0.05	-
Cherries	275	11	4.0	0.003 - 0.020	0.002 - 0.038	0.05	-
Cucumbers	211	0			0.038 ^	0.05	-
Grapes	142	0			0.038 ^	0.05	-
Green Beans (X-1)	466	29	6.2	0.012 - 0.063	0.007 - 0.038	0.05	-
Lettuce	740	0			0.021 - 0.038	5.0	-
Nectarines	96	0			0.038 ^	0.05	-
Oranges	215	0			0.038 ^	0.05	-
Peaches, Composite	536	45	8.4	0.003 - 0.016	0.002 - 0.006	0.05	-
Peaches, Single Serving	534	41	7.7	0.003 - 0.033	0.002 - 0.006	0.05	-
Pears, Canned	366	0			0.021 - 0.038	0.05	-
Pineapples	104	0			0.038 ^	0.05	-
Potatoes	369	0			0.021 - 0.038	0.05	-
Strawberries, Fresh	518	0			0.038 ^	0.05	-
Strawberries, Frozen	37	0			0.038 ^	0.05	-
Sweet Bell Peppers	454	12	2.6	0.012 - 0.048	0.007 - 0.038	0.05	-
Tomatoes, Canned	369	0			0.030 - 0.038	0.05	-
Total	6022	138					
72 Ethalfluralin (herbicide)							
Carrots	130	0			0.017 ^	NT	-
Cherries	199	0			0.023 ^	NT	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Peaches, Composite	536	0			0.020 ^	NT	-
Peaches, Single Serving	<u>534</u>	<u>0</u>			0.020 ^	NT	-
Total	1399	0					
73 Ethiofencarb (insecticide)							
Cherries	199	0			0.020 ^	NT	-
Peaches, Composite	536	0			0.020 - 0.060	NT	-
Peaches, Single Serving	<u>534</u>	<u>0</u>			0.020 - 0.060	NT	-
Total	1269	0					
74 Ethion (insecticide)							
Apples	184	0			0.005 ^	NT	-
Cantaloupe	406	0			0.002 - 0.006	NT	-
Carrots	184	0			0.001 - 0.002	NT	-
Cherries	275	0			0.001 - 0.002	NT	-
Cucumbers	737	0			0.002 - 0.005	NT	-
Grapes	741	0			0.002 - 0.006	NT	-
Green Beans	720	0			0.002 ^	NT	-
Lettuce	740	0			0.002 - 0.004	NT	-
Nectarines	96	0			0.002 ^	NT	-
Oranges	744	2	0.3	0.002 - 0.009	0.001 - 0.010	2.0	5
Peaches, Composite	536	0			0.001 ^	NT	-
Peaches, Single Serving	534	0			0.001 ^	NT	-
Pears, Canned	366	0			0.002 - 0.004	NT	-
Pineapples	104	0			0.002 ^	NT	-
Potatoes	369	0			0.002 - 0.004	NT	-
Strawberries, Fresh	518	0			0.002 - 0.010	NT	-
Strawberries, Frozen	37	0			0.002 - 0.010	NT	-
Sweet Bell Peppers (V-4)	738	4	0.5	0.003 - 0.021	0.002 ^	NT	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.002 - 0.010	NT	-
Total	8398	6					
75 Ethion di oxon (metabolite of Ethion)							
Carrots	130	0			0.001 ^	NT	-
Cherries	199	0			0.002 ^	NT	-
Peaches, Composite	536	0			0.002 ^	NT	-
Peaches, Single Serving	<u>534</u>	<u>0</u>			0.002 ^	NT	-
Total	1399	0					
76 Ethion mono oxon (metabolite of Ethion)							
Cantaloupe	4	0			0.002 ^	NT	-
Carrots	184	0			0.001 - 0.002	NT	-
Cherries	257	0			0.002 ^	NT	-
Cucumbers	125	0			0.002 ^	NT	-
Grapes	70	0			0.002 ^	NT	-
Green Beans	126	0			0.002 ^	NT	-
Lettuce	126	0			0.002 ^	NT	-
Nectarines	96	0			0.002 ^	NT	-
Oranges	654	0			0.002 ^	2.0	-
Peaches, Composite	536	0			0.002 ^	NT	-
Peaches, Single Serving	534	0			0.002 ^	NT	-
Pears, Canned	18	0			0.002 ^	NT	-
Pineapples	104	0			0.002 ^	NT	-
Potatoes	106	0			0.002 ^	NT	-
Strawberries, Fresh	52	0			0.002 ^	NT	-
Strawberries, Frozen	1	0			0.002 ^	NT	-
Sweet Bell Peppers	<u>107</u>	<u>0</u>			0.002 ^	NT	-
Total	3100	0					
77 Ethoprop (insecticide)							
Apples	184	0			0.015 ^	NT	-
Cantaloupe	99	0			0.002 ^	NT	0.02
Carrots	54	0			0.002 ^	NT	-
Cherries	76	0			0.002 ^	NT	-
Cucumbers	737	0			0.002 - 0.015	0.02	0.02

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Grapes	142	0			0.002 ^	NT	0.02
Green Beans	720	1	0.1	0.002 ^	0.001 - 0.002	0.02	-
Lettuce	216	0			0.002 ^	NT	0.02
Nectarines	96	0			0.002 ^	NT	-
Oranges	179	0			0.002 ^	NT	-
Pears, Canned	106	0			0.002 ^	NT	-
Pineapples	364	0			0.002 - 0.010	0.02	0.02
Potatoes	369	0			0.002 - 0.016	0.02	0.02
Strawberries, Fresh	131	0			0.002 ^	NT	0.02
Strawberries, Frozen	30	0			0.002 ^	NT	0.02
Sweet Bell Peppers (V-4)	738	4	0.5	0.002 - 0.024	0.001 - 0.002	NT	0.02
Tomatoes, Canned	107	0			0.002 ^	NT	0.02
Total	4348	5					

78 Fenamiphos (insecticide)

Apples	184	0			0.014 ^	0.25	-
Cantaloupe	406	0			0.004 - 0.009	NT	-
Carrots	184	0			0.001 - 0.004	NT	0.2
Cherries	275	0			0.002 - 0.004	0.25	-
Cucumbers	737	0			0.004 - 0.014	NT	-
Grapes	741	0			0.004 - 0.009	0.10	0.1
Green Beans	720	0			0.002 - 0.004	NT	-
Lettuce	740	0			0.004 - 0.006	NT	-
Nectarines	96	0			0.004 ^	NT	-
Oranges	744	0			0.004 - 0.008	0.60	0.5
Peaches, Composite	536	0			0.002 ^	0.25	-
Peaches, Single Serving	534	0			0.002 ^	0.25	-
Pears, Canned	366	0			0.004 - 0.006	NT	-
Pineapples	364	0			0.004 - 0.009	0.30	0.05
Potatoes	369	0			0.004 - 0.006	NT	0.2
Strawberries, Fresh	518	0			0.004 - 0.008	0.6	-
Strawberries, Frozen	37	0			0.004 - 0.008	0.6	-
Sweet Bell Peppers	738	0			0.002 - 0.004	NT	-
Tomatoes, Canned	369	0			0.004 - 0.008	NT	-
Total	8658	0					

79 Fenamiphos sulfone (metabolite of Fenamiphos)

Apples	184	0			0.012 ^	0.25	-
Cantaloupe	406	0			0.008 - 0.020	NT	0.05
Carrots	184	0			0.001 - 0.008	NT	0.2
Cherries	275	0			0.005 - 0.008	0.25	-
Cucumbers	737	0			0.008 - 0.012	NT	-
Grapes	741	0			0.008 - 0.020	0.10	0.1
Green Beans	720	0			0.005 - 0.008	NT	-
Lettuce	740	0			0.008 - 0.036	NT	-
Nectarines	96	0			0.008 ^	NT	-
Oranges	744	0			0.001 - 0.020	0.60	0.5
Peaches, Composite	536	0			0.005 ^	0.25	-
Peaches, Single Serving	534	0			0.005 ^	0.25	-
Pears, Canned	366	0			0.008 - 0.036	NT	-
Pineapples	364	0			0.008 - 0.019	0.30	0.05
Potatoes	369	0			0.008 - 0.036	NT	0.2
Strawberries, Fresh	518	0			0.008 - 0.020	0.6	-
Strawberries, Frozen	37	0			0.008 - 0.020	0.6	-
Sweet Bell Peppers	738	0			0.005 - 0.008	NT	-
Tomatoes, Canned	369	0			0.008 - 0.020	NT	-
Total	8658	0					

80 Fenamiphos sulfoxide (metabolite of Fenamiphos)

Cantaloupe	286	0			0.022 ^	NT	0.05
Carrots	130	0			0.001 ^	NT	0.2
Cherries	199	0			0.005 ^	0.25	-
Green Beans	426	0			0.004 ^	NT	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Peaches, Composite	536	0			0.005 ^	0.25	-
Peaches, Single Serving	534	0			0.005 ^	0.25	-
Sweet Bell Peppers	<u>527</u>	<u>0</u>			0.004 ^	NT	-
Total	2638	0					
81 Fenarimol (fungicide)							
Carrots	130	0			0.010 ^	NT	-
Cherries	199	6	3.0	0.067 ^	0.040 ^	1.0	1
Peaches, Composite	527	0			0.040 ^	NT	0.5
Peaches, Single Serving	<u>525</u>	<u>0</u>			0.040 ^	NT	0.5
Total	1381	6					
82 Fenbuconazole (fungicide)							
Carrots	184	0			0.014 - 0.030	NT	-
Cherries	257	1	0.4	0.23 ^	0.016 - 0.030	2.0	1
Cucumbers	107	0			0.030 ^	NT	0.2
Grapes	34	0			0.030 ^	NT	1
Green Beans	102	0			0.030 ^	NT	-
Lettuce	108	0			0.030 ^	NT	-
Nectarines	345	53	15.4	0.027 - 0.12	0.016 - 0.030	2.0	-
Oranges	89	0			0.030 ^	NT	-
Peaches, Composite	527	23	4.4	0.027 - 0.17	0.015 - 0.016	2.0	-
Peaches, Single Serving	525	21	4.0	0.027 - 0.075	0.015 - 0.016	2.0	-
Pineapples	104	0			0.030 ^	NT	-
Potatoes	36	0			0.030 ^	NT	-
Strawberries, Fresh	34	0			0.030 ^	NT	-
Strawberries, Frozen	1	0			0.030 ^	NT	-
Sweet Bell Peppers	<u>107</u>	<u>0</u>			0.030 ^	NT	-
Total	2560	98					
83 Fenitrothion (insecticide)							
Carrots	130	0			0.001 ^	NT	-
Cherries	199	0			0.001 ^	NT	0.5
Peaches, Composite	536	0			0.001 ^	NT	1
Peaches, Single Serving	<u>534</u>	<u>0</u>			0.001 ^	NT	1
Total	1399	0					
84 Fenitrothion oxygen analog (metabolite of Fenitrothion)							
Carrots	130	0			0.002 ^	NT	-
Cherries	199	0			0.002 ^	NT	-
Peaches, Composite	536	0			0.002 ^	NT	-
Peaches, Single Serving	<u>534</u>	<u>0</u>			0.002 ^	NT	-
Total	1399	0					
85 Fenpropathrin (insecticide)							
Carrots	130	0			0.016 ^	NT	-
Cherries	199	0			0.025 ^	NT	-
Peaches, Composite	536	0			0.025 ^	NT	-
Peaches, Single Serving	534	0			0.025 ^	NT	-
Strawberries, Fresh	258	0			0.025 ^	2.0	-
Strawberries, Frozen	<u>5</u>	<u>0</u>			0.025 ^	2.0	-
Total	1662	0					
86 Fenthion (insecticide)							
Carrots	130	0			0.002 ^	NT	-
Cherries	199	0			0.003 ^	NT	2
Peaches, Composite	536	0			0.003 ^	NT	-
Peaches, Single Serving	<u>534</u>	<u>0</u>			0.003 ^	NT	-
Total	1399	0					
87 Fenvalerate (insecticide) (isomer of Esfenvalerate)							
Apples	184	0			0.035 ^	2.0	2
Cantaloupe	406	0			0.057 - 0.092	1.0	0.2
Carrots	184	0			0.005 - 0.057	0.5	0.05

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Cherries	275	11	4.0	0.008 - 0.038	0.005 - 0.057	10.0	2
Cucumbers	737	0			0.035 - 0.057	0.5	0.2
Grapes	142	0			0.057 ^	0.05	-
Green Beans	720	27	3.8	0.012 - 0.052	0.007 - 0.057	2.0	1
Lettuce	740	0			0.042 - 0.057	0.05	2
Nectarines	345	0			0.020 - 0.057	10.0	-
Oranges	215	0			0.057 ^	0.05	2
Peaches, Composite	536	77	14.4	0.003 - 0.030	0.002 ^	10.0	5
Peaches, Single Serving	534	57	10.7	0.003 - 0.085	0.002 ^	10.0	5
Pears, Canned	366	0			0.042 - 0.057	2.0	2
Pineapples	104	0			0.057 ^	0.05	-
Potatoes	369	0			0.042 - 0.057	0.05	0.05
Strawberries, Fresh	518	0			0.057 - 0.076	0.05	-
Strawberries, Frozen	37	0			0.057 - 0.076	0.05	-
Sweet Bell Peppers	738	16	2.2	0.012 - 0.051	0.007 - 0.33	1.0	0.5
Tomatoes, Canned	369	0			0.057 - 0.083	1.0	1
Total	7519	188					
88 Fludioxonil (fungicide)							
Carrots	184	0			0.012 - 0.015	0.02	-
Cherries	9	0			0.015 ^	NT	-
Cucumbers	89	0			0.015 ^	0.01	-
Grapes	34	0			0.015 ^	NT	-
Green Beans	69	0			0.015 ^	0.01	-
Lettuce	72	0			0.015 ^	0.01	-
Nectarines	96	22	22.9	0.025 - 0.69	0.015 ^	5.0	-
Oranges	71	0			0.015 ^	NT	-
Pineapples	104	0			0.015 ^	NT	-
Potatoes	106	0			0.015 ^	0.02	-
Strawberries, Fresh	16	0			0.015 ^	2.0	-
Strawberries, Frozen	1	0			0.015 ^	2.0	-
Sweet Bell Peppers	107	0			0.015 ^	0.01	-
Total	958	22					
89 Fluridone (herbicide)							
Carrots	184	0			0.013 - 0.035	0.1	-
Cherries	9	0			0.035 ^	0.1	-
Cucumbers	107	0			0.035 ^	0.1	-
Grapes	34	0			0.035 ^	NT	-
Green Beans	86	0			0.035 ^	0.1	-
Lettuce	90	0			0.035 ^	0.1	-
Nectarines	96	0			0.035 ^	0.1	-
Oranges	89	0			0.035 ^	0.1	-
Pineapples	104	0			0.035 ^	NT	-
Potatoes	334	0			0.016 - 0.035	0.1	-
Strawberries, Fresh	16	0			0.035 ^	0.1	-
Strawberries, Frozen	1	0			0.035 ^	0.1	-
Sweet Bell Peppers	107	0			0.035 ^	0.1	-
Total	1257	0					
90 Folpet (fungicide)							
Apples	184	0			0.013 ^	25	-
Cantaloupe	406	0			0.010 - 0.019	15	-
Carrots	54	0			0.019 ^	NT	-
Cherries	257	0			0.019 - 0.080	NT	-
Cucumbers	737	0			0.013 - 0.019	15	-
Grapes	741	0			0.010 - 0.019	25	-
Green Beans	252	0			0.019 - 0.021	NT	-
Lettuce	740	0			0.019 - 0.020	50	-
Nectarines	96	0			0.019 ^	NT	-
Oranges	215	0			0.019 ^	NT	-
Peaches, Composite	494	0			0.030 - 0.080	NT	-
Peaches, Single Serving	492	0			0.030 - 0.080	NT	-
Pears, Canned	366	0			0.019 - 0.020	NT	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Pineapples	104	0			0.019 ^	NT	-
Potatoes	369	0			0.019 - 0.066	NT	-
Strawberries, Fresh	518	3	0.6	0.30 - 0.67	0.019 - 0.033	25	-
Strawberries, Frozen	37	1	2.7	0.18 ^	0.019 - 0.033	25	-
Sweet Bell Peppers (V-1)	738	1	0.1	0.035 ^	0.019 - 0.021	NT	-
Tomatoes, Canned	369	0			0.019 - 0.033	25	-
Total	7169	5					
91 Fonofos (insecticide)							
Cantaloupe	120	0			0.002 ^	NT	-
Carrots	184	0			0.001 - 0.002	0.1	-
Cherries	275	0			0.002 ^	NT	-
Cucumbers	211	0			0.002 ^	NT	-
Grapes	142	0			0.002 ^	NT	-
Green Beans	720	0			0.002 - 0.003	0.1	-
Lettuce	216	0			0.002 ^	0.1	-
Nectarines	96	0			0.002 ^	NT	-
Oranges	215	0			0.002 ^	NT	-
Peaches, Composite	536	0			0.002 ^	NT	-
Peaches, Single Serving	534	0			0.002 ^	NT	-
Pears, Canned	106	0			0.002 ^	NT	-
Pineapples	104	0			0.002 ^	NT	-
Potatoes	369	0			0.002 - 0.010	0.1	-
Strawberries, Fresh	131	0			0.002 ^	0.1	-
Strawberries, Frozen	30	0			0.002 ^	0.1	-
Sweet Bell Peppers	738	0			0.002 - 0.003	0.1	-
Tomatoes, Canned	151	0			0.002 - 0.010	0.1	-
Total	4878	0					
92 Fonofos oxygen analog (metabolite of Fonofos)							
Cantaloupe	12	0			0.006 ^	NT	-
Carrots	130	0			0.001 ^	0.1	-
Cherries	199	0			0.001 ^	NT	-
Oranges	36	0			0.006 ^	NT	-
Peaches, Composite	536	0			0.001 ^	NT	-
Peaches, Single Serving	534	0			0.001 ^	NT	-
Tomatoes, Canned	44	0			0.010 ^	0.1	-
Total	1491	0					
93 Formetanate hydrochloride (insecticide)							
Apples	173	0			0.050 ^	3	-
Nectarines	333	52	15.6	0.083 - 0.98	0.050 ^	4	-
Oranges	526	1	0.2	0.083 ^	0.050 ^	4	-
Total	1032	53					
94 Heptachlor (insecticide)							
Apples	184	0			0.003 ^	0.01 ^{AL}	-
Cantaloupe	385	0			0.003 - 0.006	0.02 ^{AL}	-
Carrots	184	0			0.002 - 0.006	0.01 ^{AL}	-
Cherries	275	0			0.002 - 0.006	0.01 ^{AL}	-
Cucumbers	737	0			0.003 - 0.006	0.02 ^{AL}	-
Grapes	142	0			0.006 ^	0.01 ^{AL}	-
Green Beans	252	0			0.005 - 0.006	0.01 ^{AL}	-
Lettuce	740	0			0.004 - 0.006	0.01 ^{AL}	-
Nectarines	96	0			0.006 ^	0.01 ^{AL}	-
Oranges	708	0			0.002 - 0.006	0.01 ^{AL}	0.01
Peaches, Composite	527	0			0.002 ^	0.01 ^{AL}	-
Peaches, Single Serving	526	0			0.002 ^	0.01 ^{AL}	-
Pears, Canned	366	0			0.004 - 0.006	0.01 ^{AL}	-
Pineapples	104	0			0.006 ^	0.02 ^{AL}	0.01
Potatoes	369	0			0.004 - 0.006	0.01 ^{AL}	-
Strawberries, Fresh	518	0			0.002 - 0.006	0.01 ^{AL}	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Strawberries, Frozen	37	0			0.002 - 0.006	0.01 ^{AL}	-
Sweet Bell Peppers	738	0			0.005 - 0.006	0.01 ^{AL}	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.002 - 0.006	0.01 ^{AL}	-
Total	7257	0					
95 Heptachlor epoxide (metabolite of Heptachlor)							
Apples	184	0			0.001 [^]	0.01 ^{AL}	-
Cantaloupe	385	0			0.005 - 0.006	0.02 ^{AL}	-
Carrots	184	1	0.5	0.007 [^]	0.004 - 0.006	0.01 ^{AL}	-
Cherries	275	0			0.004 - 0.006	0.01 ^{AL}	-
Cucumbers	737	8	1.1	0.002 - 0.017	0.001 - 0.006	0.02 ^{AL}	-
Grapes	142	0			0.006 [^]	0.01 ^{AL}	-
Green Beans	720	0			0.005 - 0.006	0.01 ^{AL}	-
Lettuce	740	0			0.004 - 0.040	0.01 ^{AL}	-
Nectarines	345	0			0.001 - 0.006	0.01 ^{AL}	-
Oranges	708	0			0.001 - 0.006	0.01 ^{AL}	0.01
Peaches, Composite	536	0			0.001 - 0.004	0.01 ^{AL}	-
Peaches, Single Serving	534	0			0.001 - 0.004	0.01 ^{AL}	-
Pears, Canned	366	0			0.004 - 0.006	0.01 ^{AL}	-
Pineapples	364	0			0.005 - 0.006	0.02 ^{AL}	0.01
Potatoes	369	0			0.004 - 0.006	0.01 ^{AL}	-
Strawberries, Fresh	518	0			0.003 - 0.006	0.01 ^{AL}	-
Strawberries, Frozen	37	0			0.003 - 0.006	0.01 ^{AL}	-
Sweet Bell Peppers	738	0			0.005 - 0.006	0.01 ^{AL}	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.003 - 0.006	0.01 ^{AL}	-
Total	8251	9					
96 Hexachlorobenzene-HCB (impurity of Quintozene)							
Apples	184	0			0.001 [^]	NT	-
Cantaloupe	406	0			0.002 - 0.004	NT	-
Carrots	54	0			0.002 [^]	NT	-
Cherries	275	0			0.001 - 0.002	NT	-
Cucumbers	737	0			0.001 - 0.002	NT	-
Grapes	142	0			0.002 [^]	NT	-
Green Beans	720	0			0.002 - 0.004	0.1	-
Lettuce	740	0			0.002 - 0.003	NT	-
Nectarines	96	0			0.002 [^]	NT	-
Oranges	215	0			0.002 [^]	NT	-
Peaches, Composite	527	0			0.001 [^]	NT	-
Peaches, Single Serving	525	0			0.001 [^]	NT	-
Pears, Canned	366	0			0.002 - 0.003	NT	-
Pineapples	104	0			0.002 [^]	NT	-
Potatoes	369	0			0.002 - 0.003	0.1	-
Strawberries, Fresh	518	0			0.002 [^]	NT	-
Strawberries, Frozen	37	0			0.002 [^]	NT	-
Sweet Bell Peppers	738	0			0.002 - 0.004	0.1	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.002 [^]	0.1	-
Total	7122	0					
97 Hexazinone (herbicide)							
Carrots	54	0			0.010 [^]	NT	-
Cherries	58	0			0.030 [^]	NT	-
Cucumbers	107	0			0.010 - 0.030	NT	-
Grapes	34	0			0.030 [^]	NT	-
Green Beans	102	0			0.010 - 0.030	NT	-
Lettuce	108	0			0.010 - 0.030	NT	-
Nectarines	96	0			0.030 [^]	NT	-
Oranges	89	0			0.010 - 0.030	NT	-
Pineapples	364	0			0.010 - 0.030	0.5	-
Potatoes	36	0			0.010 [^]	NT	-
Strawberries, Fresh	34	0			0.030 [^]	NT	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Strawberries, Frozen	1	0			0.030 ^	NT	-
Sweet Bell Peppers	107	0			0.010 - 0.030	NT	-
Total	1190	0					
98 Imazalil (fungicide)							
Apples	184	0			0.044 ^	NT	5
Cantaloupe	383	0			0.030 - 0.038	NT	2
Carrots	36	0			0.030 ^	NT	-
Cherries	275	0			0.010 - 0.030	NT	-
Cucumbers	737	0			0.030 - 0.044	NT	0.5
Grapes	142	0			0.030 ^	NT	-
Green Beans	702	0			0.030 - 0.036	NT	-
Lettuce	740	0			0.030 ^	NT	-
Nectarines	96	0			0.030 ^	NT	-
Oranges	744	479	64.4	0.010 - 0.50	0.010 - 0.17	10.0	5
Peaches, Composite (V-4)	527	4	0.8	0.017 - 0.044	0.010 ^	NT	-
Peaches, Single Serving	525	4	0.8	0.017 - 0.044	0.010 ^	NT	-
Pears, Canned	366	0			0.030 ^	NT	5
Pineapples	104	0			0.030 ^	NT	-
Potatoes	369	0			0.030 ^	NT	5
Strawberries, Fresh	518	0			0.030 - 0.17	NT	2
Strawberries, Frozen	37	0			0.030 - 0.17	NT	2
Sweet Bell Peppers	738	0			0.030 - 0.036	NT	-
Tomatoes, Canned	369	0			0.030 - 0.17	NT	-
Total	7592	487					
99 Imidacloprid (insecticide)							
Nectarines	249	0			0.010 ^	1.0	-
Oranges	528	3	0.6	0.015 - 0.023	0.010 ^	1.0	-
Total	777	3					
100 Iprodione (fungicide)							
Apples	184	0			0.024 ^	NT	5
Cantaloupe	406	0			0.021 ^	NT	-
Carrots	184	58	31.5	0.013 - 0.10	0.008 - 0.021	5.0	10
Cherries	275	81	29.5	0.025 - 2.2	0.015 - 0.021	20.0	10
Cucumbers (V-2)	737	2	0.3	0.035 - 0.14	0.021 - 0.024	NT	2
Grapes	741	207	27.9	0.023 - 1.8	0.014 - 0.021	60.0	10
Green Beans	720	66	9.2	0.020 - 0.47	0.012 - 0.021	2.0	2
Lettuce	740	5	0.7	0.013 - 0.13	0.008 - 0.021	25.0	10
Nectarines	345	236	68.4	0.010 - 7.7	0.006 - 0.021	20.0	-
Oranges	215	0			0.021 ^	NT	-
Peaches, Composite	536	340	63.4	0.025 - 8.9	0.015 ^	20.0	10
Peaches, Single Serving	534	339	63.5	0.025 - 19	0.015 ^	20.0	10
Pears, Canned	366	0			0.008 - 0.021	NT	5
Pineapples	104	0			0.021 ^	NT	-
Potatoes	369	0			0.008 - 0.021	0.5	-
Strawberries, Fresh	518	212	40.9	0.035 - 3.0	0.021 - 0.050	15	10
Strawberries, Frozen	37	19	51.4	0.035 - 0.47	0.021 - 0.050	15	10
Sweet Bell Peppers (V-4)	738	4	0.5	0.020 - 0.064	0.012 - 0.031	NT	-
Tomatoes, Canned	369	0			0.021 - 0.050	NT	5
Total	8118	1569					
101 Iprodione metabolite isomer (metabolite of Iprodione)							
Carrots	116	0			0.051 ^	5.0	-
Cherries	199	22	11.1	0.042 - 0.29	0.025 ^	20.0	-
Peaches, Composite	536	210	39.2	0.042 - 1.5	0.025 - 0.080	20.0	-
Peaches, Single Serving	534	196	36.7	0.042 - 1.8	0.025 - 0.080	20.0	-
Total	1385	428					
102 Lambda cyhalothrin Total (insecticide)							
Cantaloupe	90	0			0.060 ^	0.01	-
Carrots	184	0			0.003 - 0.060	0.01	-
Cherries	76	0			0.060 ^	0.01	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Cucumbers	161	0			0.060 ^	0.01	-
Grapes	70	0			0.060 ^	0.01	-
Green Beans	156	0			0.060 ^	0.01	-
Lettuce	162	4	2.5	0.10 - 0.41	0.060 ^	2.0	-
Nectarines	96	0			0.060 ^	0.01	-
Oranges	161	0			0.060 ^	0.01	-
Peaches, Composite	1	0			0.002 ^	0.01	-
Peaches, Single Serving	1	0			0.002 ^	0.01	-
Pears, Canned	36	0			0.060 ^	0.01	0.2
Pineapples	104	0			0.060 ^	0.01	-
Potatoes	106	0			0.060 ^	0.01	0.02
Strawberries, Fresh	106	0			0.060 ^	0.01	-
Strawberries, Frozen	1	0			0.060 ^	0.01	-
Sweet Bell Peppers	161	0			0.060 ^	0.01	-
Tomatoes, Canned	<u>54</u>	<u>0</u>			0.060 ^	0.1	-
Total	1726	4					
103 Lambda cyhalothrin R ester (isomer of Lambda cyhalothrin)							
Cherries	199	0			0.004 ^	0.01	-
Peaches, Composite	535	0			0.001 - 0.002	0.01	-
Peaches, Single Serving	533	0			0.001 - 0.002	0.01	-
Tomatoes, Canned	<u>262</u>	<u>0</u>			0.033 ^	0.1	-
Total	1529	0					
104 Lambda cyhalothrin S ester (isomer of Lambda cyhalothrin)							
Carrots	130	0			0.003 ^	0.01	-
Cherries	199	0			0.002 ^	0.01	-
Peaches, Composite	536	0			0.001 - 0.002	0.01	-
Peaches, Single Serving	<u>534</u>	<u>0</u>			0.001 - 0.002	0.01	-
Total	1399	0					
105 Lindane-BHC gamma (insecticide)							
Apples	184	0			0.003 ^	1	0.5
Cantaloupe	406	0			0.002 - 0.004	3	-
Carrots	184	0			0.002 - 0.003	0.5	0.2
Cherries	275	0			0.002 - 0.003	1	0.5
Cucumbers	737	1	0.1	0.003 ^	0.002 - 0.003	3	-
Grapes	741	0			0.002 - 0.004	1	0.5
Green Beans	720	0			0.002 - 0.004	0.5	-
Lettuce	740	0			0.002 - 0.006	3	2
Nectarines	345	1	0.3	0.002 ^	0.001 - 0.002	1	-
Oranges	744	0			0.001 - 0.003	0.5	-
Peaches, Composite	536	0			0.003 ^	1	-
Peaches, Single Serving	534	0			0.003 ^	1	-
Pears, Canned	366	0			0.002 - 0.006	1	0.5
Pineapples	364	0			0.002 - 0.004	1	-
Potatoes	369	0			0.002 - 0.006	0.5	0.05
Strawberries, Fresh	518	0			0.002 - 0.003	1	3
Strawberries, Frozen	37	0			0.002 - 0.003	1	3
Sweet Bell Peppers	738	1	0.1	0.003 ^	0.002 - 0.004	1	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.002 - 0.003	3	2
Total	8907	3					
106 Linuron (herbicide)							
Carrots	184	20	10.9	0.042 - 0.26	0.025 - 0.03	1	-
Cherries	199	0			0.030 ^	NT	-
Peaches, Composite	536	0			0.010 - 0.030	NT	-
Peaches, Single Serving	534	0			0.010 - 0.030	NT	-
Potatoes	369	0			0.025 - 0.097	1	-
Strawberries, Fresh	387	0			0.042 ^	NT	-
Strawberries, Frozen	7	0			0.042 ^	NT	-
Tomatoes, Canned	<u>262</u>	<u>0</u>			0.017 ^	NT	-
Total	2478	20					

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
107 Malathion (insecticide)							
Apples	184	0			0.010 ^	8	2
Cantaloupe	406	0			0.004 - 0.018	8	-
Carrots	184	0			0.002 - 0.004	8	0.5
Cherries	275	44	16	0.003 - 0.063	0.002 - 0.004	8	6
Cucumbers	737	0			0.004 - 0.010	8	-
Grapes	741	2	0.3	0.007 ^	0.004 - 0.018	8	8
Green Beans	720	0			0.002 - 0.004	8	2
Lettuce	740	0			0.004 - 0.007	8	8
Nectarines	345	2	0.6	0.003 ^	0.002 - 0.004	8	-
Oranges	744	0			0.002 - 0.008	8	4
Peaches, Composite	536	0			0.002 ^	8	6
Peaches, Single Serving	534	0			0.002 ^	8	6
Pears, Canned	366	0			0.004 - 0.007	8	0.5
Pineapples	364	0			0.004 - 0.018	8	-
Potatoes	369	0			0.004 - 0.007	8	0.5
Strawberries, Fresh	518	92	17.8	0.007 - 0.23	0.004 - 0.008	8	1
Strawberries, Frozen	37	12	32.4	0.007 - 0.098	0.004 - 0.008	8	1
Sweet Bell Peppers	738	13	1.8	0.003 - 0.047	0.002 - 0.004	8	-
Tomatoes, Canned	369	0			0.004 - 0.008	8	-
Total	8907	165					
108 Malathion oxygen analog (metabolite of Malathion)							
Apples	184	0			0.025 ^	NT	-
Cantaloupe	99	0			0.008 ^	NT	-
Carrots	184	0			0.002 - 0.003	NT	-
Cherries	275	0			0.003 - 0.008	NT	-
Cucumbers	211	0			0.003 - 0.008	NT	-
Grapes (V-1)	741	1	0.1	0.005 ^	0.003 - 0.028	NT	-
Green Beans	720	0			0.003 - 0.008	NT	-
Lettuce	216	0			0.003 - 0.008	NT	-
Nectarines	345	0			0.003 ^	NT	-
Oranges	707	0			0.003 - 0.008	NT	-
Peaches, Composite	536	0			0.003 ^	NT	-
Peaches, Single Serving	534	0			0.003 ^	NT	-
Pears, Canned	106	0			0.003 - 0.008	NT	-
Pineapples	364	0			0.003 - 0.028	NT	-
Potatoes	369	0			0.003 - 0.007	NT	-
Strawberries, Fresh (V-5)	131	5	3.8	0.005 - 0.013	0.003 - 0.008	NT	-
Strawberries, Frozen	30	0			0.008 ^	NT	-
Sweet Bell Peppers	738	0			0.003 - 0.008	NT	-
Tomatoes, Canned	107	0			0.008 ^	NT	-
Total	6597	6					
109 Metalaxyl (fungicide)							
Apples	184	0			0.025 ^	0.2	1
Cantaloupe	102	6	5.9	0.017 - 0.081	0.010 ^	1.0	0.2
Carrots	184	8	4.3	0.010 - 0.024	0.006 - 0.010	0.5	0.05
Cherries	275	0			0.006 - 0.010	1.0	-
Cucumbers	211	27	12.8	0.017 - 0.072	0.010 ^	1.0	0.5
Grapes	741	1	0.1	0.055 ^	0.010 - 0.033	2.0	1
Green Beans	720	2	0.3	0.020 ^	0.010 - 0.012	0.2	-
Lettuce	740	6	0.8	0.013 - 0.017	0.008 - 0.010	5.0	2
Nectarines	345	0			0.010 ^	1.0	-
Oranges	708	0			0.010 - 0.17	1.0	5
Peaches, Composite	500	1	0.2	0.010 ^	0.002 - 0.006	1.0	-
Peaches, Single Serving	498	1	0.2	0.010 ^	0.002 - 0.006	1.0	-
Pears, Canned	366	0			0.008 - 0.010	NT	1
Pineapples	364	0			0.010 - 0.033	0.1	-
Potatoes	369	7	1.9	0.013 - 0.028	0.008 - 0.010	0.5	0.05
Strawberries, Fresh	131	7	5.3	0.017 - 0.037	0.010 ^	10.0	-
Strawberries, Frozen	30	0			0.010 ^	10.0	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Sweet Bell Peppers	738	93	12.6	0.017 - 0.27	0.010 - 0.012	1.0	1
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.010 - 0.17	1.0	0.5
Total	7575	159					
110 Methamidophos (insecticide) (also a metabolite of Acephate)							
Apples	184	0			0.005 ^	0.02	-
Cantaloupe	406	45	11.1	0.002 - 0.32	0.001 - 0.006	0.5	-
Carrots	184	0			0.001 - 0.002	0.02	-
Cherries	275	0			0.001 - 0.003	0.02	-
Cucumbers	737	85	11.5	0.002 - 0.69	0.001 - 0.005	1.0	1
Grapes	143	2	1.4	0.003 - 0.010	0.001 - 0.006	0.02	-
Green Beans (X-7)	720	196	27.2	0.002 - 0.56	0.001 - 0.002	0.02	-
Lettuce	740	39	5.3	0.002 - 0.14	0.001 - 0.004	1.0	1
Nectarines	96	0			0.002 ^	0.02	-
Oranges	215	0			0.001 - 0.002	0.02	-
Peaches, Composite (X-2)	536	39	7.3	0.005 - 0.044	0.003 ^	0.02	-
Peaches, Single Serving	534	31	5.8	0.005 - 0.025	0.003 ^	0.02	-
Pears, Canned	366	1	0.3	0.002 ^	0.001 - 0.004	0.02	-
Pineapples	104	0			0.002 ^	0.02	-
Potatoes	369	2	0.5	0.003 ^	0.002 - 0.004	0.1	0.05
Strawberries, Fresh (X-1)	518	1	0.2	0.12 ^	0.001 - 0.015	0.02	-
Strawberries, Frozen	37	0			0.001 - 0.015	0.02	-
Sweet Bell Peppers	738	224	30.4	0.003 - 0.47	0.001 - 0.002	1.0	1
Tomatoes, Canned	<u>369</u>	<u>30</u>	8.1	0.002 - 0.028	0.001 - 0.017	1.0	-
Total	7271	695					
111 Methidathion (insecticide)							
Apples	184	0			0.007 ^	0.05	0.5
Cantaloupe	406	0			0.004 - 0.008	NT	-
Carrots	184	0			0.001 - 0.004	NT	-
Cherries	275	0			0.003 - 0.004	0.05	0.2
Cucumbers	737	0			0.004 - 0.007	NT	0.05
Grapes	142	0			0.004 ^	NT	1
Green Beans	720	0			0.002 - 0.004	NT	-
Lettuce	740	0			0.004 - 0.010	NT	-
Nectarines	345	0			0.002 - 0.004	0.05	0.2
Oranges	744	11	1.5	0.003 - 0.012	0.002 - 0.008	2.0	2
Peaches, Composite	536	0			0.003 ^	0.05	0.2
Peaches, Single Serving	534	0			0.003 ^	0.05	0.2
Pears, Canned	366	0			0.004 - 0.010	0.05	1
Pineapples	104	0			0.004 ^	NT	0.05
Potatoes	369	0			0.004 - 0.010	NT	0.02
Strawberries, Fresh	518	0			0.004 - 0.008	NT	-
Strawberries, Frozen	37	0			0.004 - 0.008	NT	-
Sweet Bell Peppers	738	0			0.002 - 0.004	NT	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.004 - 0.008	NT	0.1
Total	8048	11					
112 Methiocarb (insecticide) (analyzed as sulfoxide)							
Apples	184	0			0.043 ^	NT	-
Cantaloupe	84	0			0.016 ^	NT	-
Carrots	130	0			0.002 ^	NT	-
Cherries	211	0			0.012 - 0.016	NT	-
Cucumbers (V-1)	540	1	0.2	0.072 ^	0.016 - 0.043	NT	-
Grapes	18	0			0.016 ^	NT	-
Green Beans	18	0			0.016 ^	NT	-
Lettuce	18	0			0.016 ^	NT	0.2
Oranges	54	0			0.016 ^	NT	0.05
Peaches, Composite	536	0			0.012 ^	NT	-
Peaches, Single Serving	534	0			0.012 ^	NT	-
Pears, Canned	18	0			0.016 ^	NT	-
Strawberries, Fresh	396	0			0.016 - 0.017	NT	-
Strawberries, Frozen	16	0			0.016 - 0.017	NT	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Sweet Bell Peppers	32	0			0.016 ^	NT	-
Tomatoes, Canned	<u>298</u>	<u>0</u>			0.016 - 0.017	NT	-
Total	3087	1					
113 Methomyl (insecticide)							
Apples	184	2	1.1	0.040 - 0.12	0.012 ^	1	2
Cantaloupe	406	24	5.9	0.020 - 0.20	0.012 - 0.032	0.2	0.2
Carrots	184	0			0.001 - 0.012	0.2	-
Cherries	275	0			0.008 - 0.014	NT	-
Cucumbers	737	16	2.2	0.020 - 0.17	0.012 ^	0.2	0.2
Grapes	741	41	5.5	0.020 - 1.01	0.012 - 0.032	5	5
Green Beans	719	25	3.5	0.007 - 0.86	0.004 - 0.012	2	2
Lettuce	740	21	2.8	0.020 - 0.87	0.012 - 0.025	5	5
Nectarines	345	23	6.7	0.005 - 0.23	0.003 - 0.012	5	5
Oranges	744	0			0.003 - 0.012	2	1
Peaches, Composite	536	20	3.7	0.013 - 0.18	0.008 ^	5	5
Peaches, Single Serving	534	15	2.8	0.013 - 0.43	0.008 ^	5	5
Pears, Canned	366	0			0.012 - 0.025	4.0	2
Pineapples	104	0			0.012 ^	NT	0.2
Potatoes	369	0			0.012 - 0.025	0.2	0.1
Strawberries, Fresh (X-2)	518	66	12.7	0.020 - 3.0	0.012 - 0.017	2	-
Strawberries, Frozen	37	3	8.1	0.020 - 0.064	0.012 - 0.017	2	-
Sweet Bell Peppers	738	125	16.9	0.007 - 0.41	0.004 - 0.012	2	1
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.003 - 0.017	1	1
Total	8646	381					
114 Methoxychlor Total (insecticide)							
Apples	184	1	0.5	0.3 ^	0.014 ^	14	-
Cantaloupe	30	0			0.020 ^	14	-
Carrots	130	0			0.002 ^	14	-
Cherries	199	4	2.0	0.003 - 0.11	0.002 - 0.006	14	-
Cucumbers	576	1	0.2	0.023 ^	0.014 - 0.020	14	-
Grapes	72	0			0.020 ^	14	-
Green Beans	53	0			0.020 ^	14	-
Lettuce	54	0			0.020 ^	14	-
Oranges	54	0			0.020 ^	NT	-
Peaches, Composite	536	0			0.002 ^	14	-
Peaches, Single Serving	534	0			0.002 ^	14	-
Pears, Canned	70	0			0.020 ^	14	-
Strawberries, Fresh	412	0			0.017 - 0.020	14	-
Strawberries, Frozen	36	0			0.017 - 0.020	14	-
Sweet Bell Peppers	50	0			0.020 ^	14	-
Tomatoes, Canned	<u>97</u>	<u>0</u>			0.017 - 0.020	14	-
Total	3087	6					
115 Methoxychlor olefin (metabolite of Methoxychlor)							
Carrots	130	0			0.001 ^	NT	-
Cherries (V-1)	199	1	0.5	0.002 ^	0.001 ^	NT	-
Peaches, Composite	536	0			0.001 ^	NT	-
Peaches, Single Serving	<u>534</u>	<u>0</u>			0.001 ^	NT	-
Total	1399	1					
116 Methoxychlor p,p' (insecticide)							
Cantaloupe	376	0			0.020 - 0.023	14	-
Carrots	54	0			0.020 ^	14	-
Cherries	76	0			0.020 ^	14	-
Cucumbers	161	0			0.020 ^	14	-
Grapes	669	0			0.020 - 0.023	14	-
Green Beans	667	0			0.020 - 0.026	14	-
Lettuce	686	0			0.009 - 0.020	14	-
Nectarines	345	2	0.6	0.017 - 0.018	0.002 - 0.020	14	-
Oranges	161	0			0.020 ^	NT	-
Pears, Canned	296	0			0.009 - 0.020	14	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Pineapples	364	0			0.020 - 0.023	14	-
Potatoes	369	0			0.009 - 0.020	1	-
Strawberries, Fresh	106	0			0.020 ^	14	-
Strawberries, Frozen	1	0			0.020 ^	14	-
Sweet Bell Peppers	688	0			0.020 - 0.026	14	-
Tomatoes, Canned	<u>272</u>	<u>0</u>			0.017 - 0.020	14	-
Total	5291	2					
117 Metolachlor (herbicide)							
Cantaloupe	99	0			0.005 - 0.010	NT	-
Carrots	184	0			0.001 - 0.010	NT	-
Cherries	275	0			0.002 - 0.010	0.1	-
Cucumbers	211	0			0.005 - 0.010	NT	-
Grapes	142	0			0.005 - 0.010	NT	-
Green Beans	720	0			0.005 - 0.010	15.0	-
Lettuce	216	0			0.005 - 0.010	NT	-
Nectarines	345	0			0.010 - 0.012	0.1	-
Oranges	179	0			0.005 - 0.010	NT	-
Peaches, Composite	536	0			0.001 - 0.002	0.1	-
Peaches, Single Serving	534	0			0.001 - 0.002	0.1	-
Pears, Canned	106	0			0.005 ^	NT	-
Pineapples	104	0			0.005 - 0.010	NT	-
Potatoes	369	0			0.010 - 0.016	0.2	-
Strawberries, Fresh	131	0			0.005 - 0.010	NT	-
Strawberries, Frozen	30	0			0.005 ^	NT	-
Sweet Bell Peppers	694	0			0.005 - 0.010	0.1	-
Tomatoes, Canned	<u>107</u>	<u>0</u>			0.005 - 0.010	0.1	-
Total	4982	0					
118 Metribuzin (herbicide)							
Carrots	184	0			0.013 - 0.030	0.3	-
Cucumbers	36	0			0.030 ^	NT	-
Green Beans	34	0			0.030 ^	NT	-
Lettuce	36	0			0.030 ^	NT	-
Oranges	18	0			0.030 ^	NT	-
Pineapples	35	0			0.030 ^	NT	-
Potatoes	369	0			0.016 - 0.030	0.6	-
Sweet Bell Peppers (V-1)	<u>18</u>	<u>1</u>	5.6	0.050 ^	0.030 ^	NT	-
Total	730	1					
119 Mevinphos Total (insecticide)							
Apples	184	0			0.011 ^	NT	-
Cantaloupe	286	0			0.003 ^	0.5	0.05
Cucumbers	526	0			0.011 ^	0.2	0.2
Grapes	599	0			0.003 ^	0.5	0.5
Lettuce	524	0			0.012 ^	0.5	-
Oranges	529	0			0.001 - 0.017	NT	0.2
Pears, Canned	260	0			0.012 ^	NT	-
Potatoes	263	0			0.012 ^	NT	-
Strawberries, Fresh	387	0			0.017 ^	1.0	1
Strawberries, Frozen	7	0			0.017 ^	1.0	1
Tomatoes, Canned	<u>262</u>	<u>0</u>			0.017 ^	0.2	0.2
Total	3827	0					
120 Mevinphos E (isomer of Mevinphos)							
Cantaloupe	120	0			0.002 ^	0.5	0.05
Carrots	184	0			0.001 - 0.002	NT	-
Cherries	275	0			0.002 ^	NT	-
Cucumbers	211	0			0.002 ^	0.2	0.2
Grapes	142	0			0.002 ^	0.5	0.5
Green Beans	720	0			0.002 - 0.003	NT	-
Lettuce	216	0			0.002 ^	0.5	-
Nectarines	96	0			0.002 ^	NT	-
Oranges	215	0			0.002 ^	NT	0.2

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Peaches, Composite	536	0			0.002 ^	NT	-
Peaches, Single Serving	534	0			0.002 ^	NT	-
Pears, Canned	106	0			0.002 ^	NT	-
Pineapples	104	0			0.002 ^	NT	-
Potatoes	106	0			0.002 ^	NT	-
Strawberries, Fresh	131	0			0.002 ^	1.0	1
Strawberries, Frozen	30	0			0.002 ^	1.0	1
Sweet Bell Peppers	738	1	0.1	0.010 ^	0.002 - 0.003	0.25	-
Tomatoes, Canned	<u>107</u>	<u>0</u>			0.002 ^	0.2	0.2
Total	4571	1					
121 Mevinphos Z (isomer of Mevinphos)							
Cantaloupe	120	0			0.002 ^	0.5	0.05
Carrots	184	0			0.001 - 0.002	NT	-
Cherries	275	0			0.002 ^	NT	-
Cucumbers	211	0			0.002 ^	0.2	0.2
Grapes	142	0			0.002 ^	0.5	0.5
Green Beans	720	0			0.002 - 0.003	NT	-
Lettuce	216	0			0.002 ^	0.5	-
Nectarines	96	0			0.002 ^	NT	-
Oranges	215	0			0.002 ^	NT	0.2
Peaches, Composite	536	0			0.002 ^	NT	-
Peaches, Single Serving	534	0			0.002 ^	NT	-
Pears, Canned	106	0			0.002 ^	NT	-
Pineapples	104	0			0.002 ^	NT	-
Potatoes	106	0			0.002 ^	NT	-
Strawberries, Fresh	131	0			0.002 ^	1.0	1
Strawberries, Frozen	30	0			0.002 ^	1.0	1
Sweet Bell Peppers	738	0			0.002 - 0.003	0.25	-
Tomatoes, Canned	<u>107</u>	<u>0</u>			0.002 ^	0.2	0.2
Total	4571	0					
122 Monocrotophos (insecticide)							
Potatoes	<u>369</u>	<u>0</u>			0.003 - 0.007	0.1	0.05
Total	369	0					
123 Myclobutanil (fungicide)							
Apples	184	1	0.5	0.042 ^	0.025 ^	0.5	0.5
Cantaloupe	406	0			0.020 - 0.045	0.2	-
Carrots	166	0			0.003 - 0.020	0.03	-
Cherries	275	139	50.5	0.008 - 0.32	0.005 - 0.020	5.0	1
Cucumbers	737	2	0.3	0.042 - 0.061	0.020 - 0.025	0.2	-
Grapes	741	152	20.5	0.030 - 0.54	0.018 - 0.045	1.0	1
Green Beans	234	0			0.020 - 0.024	1.0	-
Lettuce	740	0			0.008 - 0.020	0.03	-
Nectarines	345	14	4.1	0.013 - 0.053	0.008 - 0.020	2.0	-
Oranges	215	0			0.020 ^	NT	-
Peaches, Composite	536	16	2.9	0.008 - 0.097	0.005 ^	2.0	0.5
Peaches, Single Serving	534	14	2.6	0.008 - 0.20	0.005 ^	2.0	0.5
Pears, Canned	366	0			0.008 - 0.020	NT	0.5
Pineapples	104	0			0.020 ^	NT	-
Potatoes	369	0			0.008 - 0.020	0.03	-
Strawberries, Fresh (X-1)	518	71	13.7	0.033 - 0.56	0.020 - 0.083	0.5	-
Strawberries, Frozen	37	4	10.8	0.033 ^	0.020 - 0.083	0.5	-
Sweet Bell Peppers	738	16	2.2	0.033 - 0.073	0.020 - 0.024	1.0	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.020 - 0.050	0.3	0.3
Total	7614	429					
124 Napropamide (herbicide)							
Carrots	<u>130</u>	<u>0</u>			0.007 ^	NT	-
Total	130	0					
125 Norflurazon (herbicide)							
Apples	184	0			0.025 ^	0.1	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Cantaloupe	406	0			0.020 - 0.030	NT	-
Carrots	54	0			0.020 ^	NT	-
Cherries	275	0			0.012 - 0.020	0.1	-
Cucumbers	737	0			0.020 - 0.025	NT	-
Grapes	741	0			0.020 - 0.030	0.1	-
Green Beans	234	0			0.020 - 0.039	NT	-
Lettuce	740	0			0.018 - 0.020	NT	-
Nectarines	345	0			0.010 - 0.020	0.1	-
Oranges	744	0			0.010 - 0.042	0.2	-
Peaches, Composite	536	0			0.012 - 0.040	0.1	-
Peaches, Single Serving	534	0			0.012 - 0.040	0.1	-
Pears, Canned	366	0			0.018 - 0.020	0.1	-
Pineapples	104	0			0.020 ^	NT	-
Potatoes	369	0			0.018 - 0.020	NT	-
Strawberries, Fresh	518	0			0.020 - 0.042	NT	-
Strawberries, Frozen	37	0			0.020 - 0.042	NT	-
Sweet Bell Peppers	738	0			0.020 - 0.039	NT	-
Tomatoes, Canned	369	0			0.020 - 0.042	NT	-
Total	8031	0					

126 Norflurazon desmethyl (metabolite of Norflurazon)

Apples	184	0			0.025 ^	0.1	-
Cantaloupe	406	0			0.030 ^	NT	-
Carrots	54	0			0.030 ^	NT	-
Cherries	263	0			0.010 - 0.030	0.1	-
Cucumbers	737	0			0.025 - 0.030	NT	-
Grapes	741	0			0.030 ^	0.1	-
Green Beans	234	0			0.030 - 0.043	NT	-
Lettuce	740	0			0.021 - 0.030	NT	-
Nectarines	345	3	0.9	0.012 - 0.050	0.010 - 0.030	0.1	-
Oranges	744	0			0.010 - 0.042	0.2	-
Peaches, Composite	527	6	1.1	0.017 ^	0.010 - 0.015	0.1	-
Peaches, Single Serving	525	5	0.9	0.017 ^	0.010 - 0.015	0.1	-
Pears, Canned	366	0			0.021 - 0.030	0.1	-
Pineapples	104	0			0.030 ^	NT	-
Potatoes	369	0			0.021 - 0.030	NT	-
Strawberries, Fresh	518	0			0.030 - 0.042	NT	-
Strawberries, Frozen	37	0			0.030 - 0.042	NT	-
Sweet Bell Peppers	738	0			0.030 - 0.043	NT	-
Tomatoes, Canned	369	0			0.030 - 0.042	NT	-
Total	8001	14					

127 Omethoate (metabolite of Dimethoate)

Apples	184	3	1.6	0.015 ^	0.009 ^	2	-
Cantaloupe	406	1	0.2	0.007 ^	0.004 - 0.014	1	-
Carrots	184	0			0.003 - 0.004	NT	-
Cherries	275	9	3.3	0.007 - 0.15	0.004 - 0.005	2	-
Cucumbers (V-5)	737	5	0.7	0.013 - 0.060	0.004 - 0.009	NT	-
Grapes	741	103	13.9	0.007 - 0.27	0.004 - 0.014	1	-
Green Beans	720	64	8.9	0.005 - 0.13	0.003 - 0.004	2	-
Lettuce	740	14	1.9	0.007 - 0.080	0.004 - 0.018	2	-
Nectarines	96	0			0.004 ^	NT	-
Oranges	744	0			0.003 - 0.017	2	-
Peaches, Composite	536	0			0.005 ^	NT	-
Peaches, Single Serving	534	0			0.005 ^	NT	-
Pears, Canned	366	0			0.004 - 0.018	2	-
Pineapples	104	0			0.004 ^	NT	-
Potatoes	369	0			0.004 - 0.018	0.2	-
Strawberries, Fresh	518	0			0.004 - 0.017	NT	-
Strawberries, Frozen	37	0			0.004 - 0.017	NT	-
Sweet Bell Peppers	738	63	8.5	0.005 - 0.15	0.003 - 0.004	2	-
Tomatoes, Canned	369	0			0.004 - 0.017	2	-
Total	8398	262					

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
128 Oxadixyl (fungicide)							
Cantaloupe	99	0			0.010 - 0.015	0.1	-
Carrots	184	0			0.013 - 0.015	0.1	-
Cherries	76	0			0.010 - 0.015	NT	-
Cucumbers	211	16	7.6	0.017 - 0.086	0.010 - 0.015	0.1	-
Grapes	142	0			0.010 - 0.015	NT	-
Green Beans	209	0			0.010 - 0.015	NT	-
Lettuce	216	0			0.010 - 0.015	0.1	-
Nectarines	96	0			0.015 ^	NT	-
Oranges	179	0			0.010 - 0.015	NT	-
Pears, Canned	106	0			0.010 ^	NT	-
Pineapples	104	0			0.010 - 0.015	NT	-
Potatoes	106	0			0.015 ^	0.1	-
Strawberries, Fresh	131	0			0.010 - 0.015	NT	-
Strawberries, Frozen	30	0			0.010 ^	NT	-
Sweet Bell Peppers	211	0			0.010 - 0.015	0.1	-
Tomatoes, Canned	<u>107</u>	<u>0</u>			0.010 - 0.015	0.1	-
Total	2207	16					
129 Oxamyl (insecticide)							
Apples	184	1	0.5	0.033 ^	0.020 ^	2	2
Cantaloupe	406	0			0.018 - 0.035	2.0	2
Carrots	184	0			0.002 - 0.018	0.1	0.1
Cherries	275	0			0.010 - 0.022	NT	-
Cucumbers	737	23	3.1	0.030 - 0.59	0.018 - 0.020	2.0	2
Grapes	142	0			0.018 ^	NT	-
Green Beans (V-1)	719	1	0.1	0.035 ^	0.005 - 0.018	NT	-
Lettuce	740	0			0.008 - 0.076	NT	-
Nectarines	96	0			0.018 ^	NT	-
Oranges	744	0			0.003 - 0.018	3	5
Peaches, Composite	536	0			0.010 ^	NT	-
Peaches, Single Serving	534	0			0.010 ^	NT	-
Pears, Canned	366	0			0.008 - 0.076	2.0	-
Pineapples	364	0			0.015 - 0.018	1	1
Potatoes	369	0			0.008 - 0.018	0.1	0.1
Strawberries, Fresh	518	0			0.018 - 0.020	NT	-
Strawberries, Frozen	37	0			0.018 - 0.020	NT	-
Sweet Bell Peppers	738	63	8.5	0.008 - 0.21	0.005 - 0.018	3	2
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.003 - 0.020	2	2
Total	8058	88					
130 Oxychlordane (metabolite of Chlordane)							
Cantaloupe	9	0			0.003 ^	0.1 ^{AL}	0.02
Carrots	130	0			0.002 ^	0.1 ^{AL}	0.02
Cherries	199	0			0.002 ^	0.1 ^{AL}	0.02
Cucumbers	14	0			0.003 ^	0.1 ^{AL}	0.02
Grapes	18	0			0.003 ^	0.1 ^{AL}	0.02
Green Beans	18	0			0.003 ^	0.1 ^{AL}	0.02
Lettuce	18	0			0.003 ^	0.1 ^{AL}	0.02
Oranges	18	0			0.003 ^	0.1 ^{AL}	0.02
Peaches, Composite	536	0			0.002 ^	0.1 ^{AL}	0.02
Peaches, Single Serving	534	0			0.002 ^	0.1 ^{AL}	0.02
Pears, Canned	18	0			0.003 ^	0.1 ^{AL}	0.02
Strawberries, Fresh	9	0			0.003 ^	0.1 ^{AL}	0.02
Strawberries, Frozen	9	0			0.003 ^	0.1 ^{AL}	0.02
Sweet Bell Peppers	14	0			0.003 ^	0.1 ^{AL}	0.02
Tomatoes, Canned	<u>18</u>	<u>0</u>			0.003 ^	0.1 ^{AL}	0.02
Total	1562	0					
131 Oxydemeton methyl sulfone (insecticide) (metabolite of Oxydemeton methyl)							
Apples	184	0			0.015 ^	1	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Cantaloupe	406	0			0.015 - 0.056	0.3	-
Carrots	184	0			0.002 - 0.015	NT	-
Cherries	275	0			0.003 - 0.015	NT	-
Cucumbers	737	3	0.4	0.025 - 0.18	0.015 ^	1	-
Grapes	741	0			0.015 - 0.056	0.1	-
Green Beans	720	0			0.004 - 0.015	0.5	-
Lettuce	740	0			0.015 - 0.091	2	-
Nectarines	96	0			0.015 ^	NT	-
Oranges	744	0			0.002 - 0.050	1	-
Peaches, Composite	536	0			0.003 ^	NT	-
Peaches, Single Serving	534	0			0.003 ^	NT	-
Pears, Canned	366	0			0.015 - 0.091	0.3	-
Pineapples	104	0			0.015 ^	NT	-
Potatoes	369	0			0.015 - 0.090	NT	-
Strawberries, Fresh	518	0			0.015 - 0.050	2	-
Strawberries, Frozen	37	0			0.015 - 0.050	2	-
Sweet Bell Peppers	738	1	0.1	0.007 ^	0.004 - 0.015	0.75	-
Tomatoes, Canned	369	0			0.015 - 0.050	NT	-
Total	8398	4					

132 Oxyfluorfen (herbicide)

Cantaloupe	99	0			0.010 - 0.030	NT	-
Carrots	184	0			0.003 - 0.030	NT	-
Cherries	275	0			0.009 - 0.030	0.05	-
Cucumbers	211	0			0.010 - 0.030	NT	-
Grapes	741	0			0.010 - 0.030	0.05	-
Green Beans	191	0			0.010 - 0.030	NT	-
Lettuce	216	0			0.010 - 0.030	NT	-
Nectarines	345	0			0.012 - 0.030	0.05	-
Oranges	179	0			0.010 - 0.030	NT	-
Peaches, Composite	536	0			0.009 ^	0.05	-
Peaches, Single Serving	534	0			0.009 ^	0.05	-
Pears, Canned	106	0			0.010 ^	0.05	-
Pineapples	104	0			0.010 - 0.030	NT	-
Potatoes	106	0			0.030 ^	NT	-
Strawberries, Fresh	131	0			0.010 - 0.030	0.05	-
Strawberries, Frozen	30	0			0.010 ^	0.05	-
Sweet Bell Peppers	211	0			0.010 - 0.030	NT	-
Tomatoes, Canned	107	0			0.010 - 0.030	NT	-
Total	4306	0					

133 Parathion (insecticide)

Apples	184	0			0.010 ^	1	0.05
Cantaloupe	120	0			0.003 ^	1	-
Carrots	184	6	3.3	0.003 - 0.044	0.002 - 0.003	1	-
Cherries	275	0			0.002 - 0.003	1	-
Cucumbers	737	0			0.003 - 0.010	1	-
Grapes	741	0			0.003 - 0.033	1	-
Green Beans	720	1	0.1	0.003 ^	0.002 - 0.003	1	-
Lettuce	740	1	0.1	0.019 ^	0.003 - 0.006	1	-
Nectarines	345	0			0.002 - 0.003	1	-
Oranges	744	0			0.002 - 0.017	NT	0.5
Peaches, Composite	536	1	0.2	0.022 ^	0.002 ^	1	1
Peaches, Single Serving	534	1	0.2	0.011 ^	0.002 ^	1	1
Pears, Canned	366	0			0.003 - 0.006	1	-
Pineapples	364	0			0.003 - 0.033	1	-
Potatoes	369	0			0.003 - 0.006	0.1	0.05
Strawberries, Fresh	518	0			0.003 - 0.017	1	-
Strawberries, Frozen	37	0			0.003 - 0.017	1	-
Sweet Bell Peppers	738	0			0.002 - 0.003	1	-
Tomatoes, Canned	369	0			0.003 - 0.017	1	-
Total	8621	10					

134 Parathion methyl (insecticide)

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Apples	184	0			0.006 ^	1	-
Cantaloupe	406	0			0.002 - 0.013	1	-
Carrots	184	2	1.1	0.005 - 0.035	0.001 - 0.002	1	1
Cherries	275	0			0.002 - 0.003	1	0.01
Cucumbers	737	0			0.002 - 0.006	1	-
Grapes	741	0			0.002 - 0.013	1	-
Green Beans	720	0			0.002 ^	1	0.05
Lettuce	740	0			0.002 - 0.006	1	0.05
Nectarines	345	1	0.3	0.003 ^	0.002 ^	1	-
Oranges	744	0			0.002 - 0.008	NT	-
Peaches, Composite	536	16	2.9	0.005 - 0.056	0.003 ^	1	-
Peaches, Single Serving	534	17	3.2	0.005 - 0.025	0.003 ^	1	-
Pears, Canned	366	0			0.002 - 0.006	1	-
Pineapples	104	0			0.002 ^	1	-
Potatoes	369	0			0.002 - 0.006	0.1	0.05
Strawberries, Fresh	518	0			0.002 - 0.008	1	-
Strawberries, Frozen	37	0			0.002 - 0.008	1	-
Sweet Bell Peppers	738	0			0.002 ^	1	-
Tomatoes, Canned	369	0			0.002 - 0.008	1	-
Total	8647	36					

135 Parathion methyl oxygen analog (metabolite of Parathion methyl)

Cantaloupe	99	0			0.005 ^	NT	-
Carrots	184	0			0.003 ^	NT	-
Cherries	275	0			0.003 - 0.005	NT	-
Cucumbers	211	0			0.003 - 0.005	NT	-
Grapes	741	0			0.003 - 0.019	NT	-
Green Beans	209	0			0.003 - 0.005	NT	-
Lettuce	216	0			0.003 - 0.005	NT	-
Nectarines	345	0			0.002 - 0.003	NT	-
Oranges	707	0			0.002 - 0.007	NT	-
Peaches, Composite	536	0			0.005 ^	NT	-
Peaches, Single Serving	534	0			0.005 ^	NT	-
Pears, Canned	106	0			0.005 ^	NT	-
Pineapples	104	0			0.003 - 0.005	NT	-
Potatoes	106	0			0.003 ^	NT	-
Strawberries, Fresh	131	0			0.003 - 0.005	NT	-
Strawberries, Frozen	30	0			0.005 ^	NT	-
Sweet Bell Peppers	211	0			0.003 - 0.005	NT	-
Tomatoes, Canned	107	0			0.005 ^	NT	-
Total	4852	0					

136 Parathion oxygen analog (metabolite of Parathion)

Apples	184	0			0.025 ^	NT	-
Cantaloupe	99	0			0.004 ^	NT	-
Carrots	184	0			0.002 ^	NT	-
Cherries	275	0			0.002 - 0.004	NT	-
Cucumbers	211	0			0.002 - 0.004	NT	-
Grapes	741	0			0.002 - 0.041	NT	-
Green Beans	720	0			0.002 - 0.004	NT	-
Lettuce	216	0			0.002 - 0.004	NT	-
Nectarines	345	0			0.002 - 0.005	NT	-
Oranges	707	0			0.001 - 0.004	NT	-
Peaches, Composite	536	0			0.003 ^	NT	-
Peaches, Single Serving	534	0			0.003 ^	NT	-
Pears, Canned	106	0			0.004 ^	NT	-
Pineapples	364	0			0.002 - 0.041	NT	-
Potatoes	369	0			0.002 - 0.016	NT	-
Strawberries, Fresh	131	0			0.002 - 0.004	NT	-
Strawberries, Frozen	30	0			0.004 ^	NT	-
Sweet Bell Peppers	738	0			0.002 - 0.004	NT	-
Tomatoes, Canned	107	0			0.004 ^	NT	-
Total	6597	0					

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
137 Pendimethalin (herbicide)							
Cantaloupe	99	0			0.020 ^	NT	-
Carrots	54	0			0.020 ^	NT	-
Cherries	76	0			0.020 ^	NT	-
Cucumbers	211	0			0.020 ^	NT	-
Grapes	142	0			0.020 ^	NT	-
Green Beans	720	0			0.020 - 0.021	NT	-
Lettuce	216	0			0.020 ^	NT	-
Nectarines	96	0			0.020 ^	NT	-
Oranges	179	0			0.020 ^	NT	-
Pears, Canned	106	0			0.020 ^	NT	-
Pineapples	104	0			0.020 ^	NT	-
Potatoes	369	0			0.016 - 0.020	0.1	-
Strawberries, Fresh	131	0			0.020 ^	NT	-
Strawberries, Frozen	30	0			0.020 ^	NT	-
Sweet Bell Peppers	694	0			0.020 - 0.021	NT	-
Tomatoes, Canned	<u>107</u>	<u>0</u>			0.020 ^	NT	-
Total	3334	0					
138 Pentachlorobenzene-PCB (metabolite of Quintozene)							
Apples	184	0			0.004 ^	NT	-
Cantaloupe	406	0			0.002 - 0.003	NT	-
Carrots	96	0			0.002 ^	NT	-
Cherries	275	0			0.002 ^	NT	-
Cucumbers	737	0			0.002 - 0.004	NT	-
Grapes	142	0			0.002 ^	NT	-
Green Beans	252	0			0.002 - 0.003	0.1	-
Lettuce	740	0			0.002 ^	NT	-
Nectarines	96	0			0.002 ^	NT	-
Oranges	215	0			0.002 ^	NT	-
Peaches, Composite	521	0			0.001 - 0.002	NT	-
Peaches, Single Serving	519	0			0.001 - 0.002	NT	-
Pears, Canned	366	0			0.002 ^	NT	-
Pineapples	104	0			0.002 ^	NT	-
Potatoes	369	5	1.4	0.003 - 0.044	0.002 ^	0.1	-
Strawberries, Fresh	518	0			0.002 - 0.003	NT	-
Strawberries, Frozen	37	0			0.002 - 0.003	NT	-
Sweet Bell Peppers	738	0			0.002 - 0.003	0.1	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.002 - 0.003	0.1	-
Total	6684	5					
139 Permethrin Total (insecticide)							
Lettuce	392	22	5.6	0.048 - 2.5	0.029 ^	20.0	2
Pears, Canned	109	0			0.029 ^	3.0	2
Potatoes	263	0			0.029 ^	0.05	0.05
Strawberries, Fresh	387	0			0.076 ^	NT	1
Strawberries, Frozen	7	0			0.076 ^	NT	1
Tomatoes, Canned	<u>262</u>	<u>0</u>			0.083 ^	2	1
Total	1420	22					
140 Permethrin cis (isomer of Permethrin)							
Apples	184	0			0.011 ^	0.05	2
Cantaloupe	406	1	0.2	0.025 ^	0.015 - 0.029	3.0	0.1
Carrots	184	0			0.001 - 0.015	NT	0.1
Cherries	275	5	1.8	0.007 - 0.027	0.004 - 0.015	3.0	2
Cucumbers	737	5	0.7	0.018 - 0.025	0.011 - 0.015	3.0	0.5
Grapes	142	0			0.015 ^	NT	2
Green Beans	720	0			0.015 - 0.026	NT	1
Lettuce	348	31	8.9	0.025 - 1.7	0.015 - 0.024	20.0	2
Nectarines	96	0			0.015 ^	NT	2
Oranges	215	0			0.015 ^	NT	0.5
Peaches, Composite	536	23	4.3	0.004 - 0.092	0.001 - 0.002	5.0	2
Peaches, Single Serving	534	23	4.3	0.003 - 0.18	0.001 - 0.002	5.0	2

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Pears, Canned	257	0			0.015 - 0.024	3.0	2
Pineapples	104	0			0.015 ^	NT	-
Potatoes	106	0			0.015 ^	0.05	0.05
Strawberries, Fresh	131	0			0.015 ^	NT	1
Strawberries, Frozen	30	0			0.015 ^	NT	1
Sweet Bell Peppers	738	57	7.7	0.025 - 0.29	0.015 - 0.026	1.0	1
Tomatoes, Canned	<u>107</u>	<u>0</u>			0.015 ^	2	1
Total	5850	145					
141 Permethrin trans (isomer of Permethrin)							
Apples	184	0			0.012 ^	0.05	2
Cantaloupe	406	0			0.015 - 0.029	3.0	0.1
Carrots	184	0			0.001 - 0.015	NT	0.1
Cherries	275	8	2.9	0.004 - 0.025	0.001 - 0.015	3.0	2
Cucumbers	737	4	0.5	0.020 ^	0.012 - 0.015	3.0	0.5
Grapes	142	0			0.015 ^	NT	2
Green Beans	720	0			0.015 - 0.026	NT	1
Lettuce	348	29	8.3	0.025 - 1.4	0.015 - 0.029	20.0	2
Nectarines	96	0			0.015 ^	NT	2
Oranges	215	0			0.015 ^	NT	0.5
Peaches, Composite	536	28	5.2	0.002 - 0.11	0.001 ^	5.0	2
Peaches, Single Serving	534	25	4.7	0.002 - 0.16	0.001 ^	5.0	2
Pears, Canned	257	0			0.015 - 0.029	3.0	2
Pineapples	104	0			0.015 ^	NT	-
Potatoes	106	0			0.015 ^	0.05	0.05
Strawberries, Fresh	131	0			0.015 ^	NT	1
Strawberries, Frozen	30	0			0.015 ^	NT	1
Sweet Bell Peppers	738	63	8.5	0.025 - 0.39	0.015 - 0.026	1.0	1
Tomatoes, Canned	<u>107</u>	<u>0</u>			0.015 ^	2	1
Total	5850	157					
142 Phenmedipham (herbicide)							
Carrots	<u>130</u>	<u>0</u>			0.067 ^	NT	-
Total	130	0					
143 Phenthoate (insecticide)							
Carrots	130	0			0.004 ^	NT	-
Cherries	199	0			0.010 ^	NT	-
Peaches, Composite	536	0			0.010 ^	NT	-
Peaches, Single Serving	<u>534</u>	<u>0</u>			0.010 ^	NT	-
Total	1399	0					
144 o-Phenylphenol (fungicide)							
Apples	184	2	1.1	0.042 - 0.20	0.025 ^	25.0	-
Cantaloupe	120	3	2.5	0.10 - 0.13	0.010 ^	10	-
Carrots	184	1	0.5	0.005 ^	0.003 - 0.010	20	-
Cherries	275	0			0.010 - 0.015	5.0	-
Cucumbers	737	32	4.3	0.017 - 1.9	0.010 - 0.025	10	-
Grapes	142	0			0.010 ^	NT	-
Green Beans (V-1)	276	1	0.4	0.007 ^	0.004 - 0.010	NT	-
Lettuce	740	0			0.008 - 0.010	NT	-
Nectarines	345	0			0.010 ^	5.0	-
Oranges	744	33	4.4	0.006 - 0.070	0.005 - 0.02	10.0	-
Peaches, Composite	536	0			0.015 ^	20.0	-
Peaches, Single Serving	534	0			0.015 ^	20.0	-
Pears, Canned	366	16	4.4	0.013 - 0.017	0.008 - 0.010	25.0	25
Pineapples	364	0			0.010 ^	10.0	-
Potatoes (V-1)	369	1	0.3	0.013 ^	0.008 - 0.010	NT	-
Strawberries, Fresh	518	0			0.010 - 0.020	NT	-
Strawberries, Frozen	37	0			0.010 - 0.020	NT	-
Sweet Bell Peppers	308	11	3.6	0.007 - 0.094	0.004 - 0.010	10	-
Tomatoes, Canned	<u>369</u>	<u>7</u>	1.9	0.017 ^	0.010 - 0.020	10	-
Total	7148	107					

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
145 Phorate (insecticide)							
Apples	184	0			0.014 ^	NT	-
Cantaloupe	406	0			0.006 - 0.011	NT	-
Carrots	184	0			0.002 - 0.011	NT	-
Cherries	275	0			0.004 - 0.011	NT	-
Cucumbers	737	0			0.011 - 0.014	NT	-
Grapes	142	0			0.011 ^	NT	-
Green Beans	720	0			0.002 - 0.011	0.1	0.1
Lettuce	740	0			0.011 - 0.012	NT	-
Nectarines	96	0			0.011 ^	NT	-
Oranges	215	0			0.011 ^	NT	-
Peaches, Composite	536	0			0.004 ^	NT	-
Peaches, Single Serving	534	0			0.004 ^	NT	-
Pears, Canned	366	0			0.011 - 0.012	NT	-
Pineapples	364	0			0.006 - 0.011	NT	-
Potatoes	369	0			0.011 - 0.012	0.5	0.2
Strawberries, Fresh	518	0			0.008 - 0.011	NT	-
Strawberries, Frozen	37	0			0.008 - 0.011	NT	-
Sweet Bell Peppers	738	0			0.002 - 0.011	NT	-
Tomatoes, Canned	369	0			0.008 - 0.011	NT	-
Total	7530	0					
146 Phorate oxygen analog (metabolite of Phorate)							
Carrots	130	0			0.001 ^	NT	-
Cherries	199	0			0.003 ^	NT	-
Peaches, Composite	536	0			0.003 ^	NT	-
Peaches, Single Serving	534	0			0.003 ^	NT	-
Total	1399	0					
147 Phorate sulfone (metabolite of Phorate)							
Apples	184	0			0.015 ^	NT	-
Cantaloupe	406	0			0.004 - 0.016	NT	-
Carrots	184	0			0.002 - 0.004	NT	-
Cherries	275	0			0.003 - 0.004	NT	-
Cucumbers	737	0			0.004 - 0.015	NT	-
Grapes	142	0			0.004 ^	NT	-
Green Beans	720	0			0.002 - 0.004	0.1	0.1
Lettuce	740	0			0.004 - 0.024	NT	-
Nectarines	96	0			0.004 ^	NT	-
Oranges	215	0			0.004 ^	NT	-
Peaches, Composite	536	0			0.003 ^	NT	-
Peaches, Single Serving	534	0			0.003 ^	NT	-
Pears, Canned	366	0			0.004 - 0.024	NT	-
Pineapples	364	0			0.004 - 0.017	NT	-
Potatoes	369	6	1.6	0.007 - 0.040	0.004 - 0.024	0.5	0.2
Strawberries, Fresh	518	0			0.004 - 0.027	NT	-
Strawberries, Frozen	37	0			0.004 - 0.027	NT	-
Sweet Bell Peppers	738	0			0.002 - 0.004	NT	-
Tomatoes, Canned	369	0			0.004 - 0.027	NT	-
Total	7530	6					
148 Phorate sulfoxide (metabolite of Phorate)							
Apples	184	0			0.020 ^	NT	-
Cantaloupe	286	0			0.030 ^	NT	-
Carrots	130	0			0.004 ^	NT	-
Cherries	199	0			0.004 ^	NT	-
Cucumbers	526	0			0.020 ^	NT	-
Peaches, Composite	536	0			0.004 ^	NT	-
Peaches, Single Serving	534	0			0.004 ^	NT	-
Tomatoes, Canned	262	0			0.061 ^	NT	-
Total	2657	0					
149 Phosalone (insecticide)							
Apples	184	1	0.5	0.072 ^	0.019 ^	10.0	5

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Cantaloupe	120	0			0.006 ^	NT	-
Carrots	184	0			0.001 - 0.006	NT	-
Cherries	275	0			0.006 ^	15.0	-
Cucumbers	737	0			0.006 - 0.019	NT	-
Grapes	741	0			0.006 - 0.040	10.0	-
Green Beans	209	0			0.006 ^	NT	-
Lettuce	216	0			0.006 ^	NT	-
Nectarines	96	0			0.006 ^	NT	-
Oranges	215	0			0.006 ^	NT	-
Peaches, Composite	536	0			0.006 ^	15.0	-
Peaches, Single Serving	534	0			0.006 ^	15.0	-
Pears, Canned	106	0			0.006 ^	10.0	-
Pineapples	104	0			0.006 ^	NT	-
Potatoes	106	0			0.006 ^	NT	-
Strawberries, Fresh	518	0			0.006 - 0.033	NT	-
Strawberries, Frozen	37	0			0.006 - 0.033	NT	-
Sweet Bell Peppers	211	0			0.006 ^	NT	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.006 - 0.033	NT	-
Total	5498	1					

150 Phosmet (insecticide)

Apples	184	22	11.9	0.018 - 0.55	0.013 ^	10	10
Cantaloupe	120	0			0.005 ^	NT	-
Carrots (V-6)	184	6	3.3	0.002 - 0.013	0.001 - 0.005	NT	-
Cherries	275	1	0.4	0.008 ^	0.005 - 0.006	10	-
Cucumbers	737	0			0.005 - 0.013	NT	-
Grapes	741	12	1.6	0.008 - 0.49	0.005 - 0.018	10	10
Green Beans	720	0			0.005 - 0.008	NT	-
Lettuce	740	0			0.005 - 0.012	NT	-
Nectarines	345	166	48.1	0.003 - 0.38	0.002 - 0.005	5	5
Oranges	744	0			0.002 - 0.017	5	5
Peaches, Composite	536	196	36.6	0.010 - 1.3	0.006 ^	10	10
Peaches, Single Serving	534	188	35.2	0.010 - 2.4	0.006 ^	10	10
Pears, Canned	366	0			0.005 - 0.012	10	10
Pineapples	104	0			0.005 ^	NT	-
Potatoes	369	0			0.005 - 0.012	0.1	-
Strawberries, Fresh	518	0			0.005 - 0.017	NT	-
Strawberries, Frozen	37	0			0.005 - 0.017	NT	-
Sweet Bell Peppers	738	0			0.005 - 0.008	NT	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.005 - 0.017	NT	-
Total	8361	591					

151 Phosphamidon (insecticide)

Apples	184	1	0.5	0.020 ^	0.012 ^	1	0.5
Cantaloupe	406	0			0.012 - 0.020	NT	-
Carrots	184	0			0.001 - 0.012	NT	0.2
Cherries	275	0			0.002 - 0.012	NT	0.2
Cucumbers	737	0			0.012 ^	NT	0.1
Grapes	142	0			0.012 ^	NT	-
Green Beans	252	0			0.012 - 0.093	NT	0.2
Lettuce	740	0			0.012 - 0.029	NT	0.1
Nectarines	96	0			0.012 ^	NT	-
Oranges	744	0			0.002 - 0.033	NT	0.4
Peaches, Composite	536	0			0.002 ^	NT	0.2
Peaches, Single Serving	534	0			0.002 ^	NT	0.2
Pears, Canned	366	0			0.012 - 0.029	NT	0.5
Pineapples	104	0			0.012 ^	NT	-
Potatoes	369	0			0.012 - 0.029	NT	0.05
Strawberries, Fresh	518	0			0.012 - 0.033	NT	0.2
Strawberries, Frozen	37	0			0.012 - 0.033	NT	0.2
Sweet Bell Peppers	738	0			0.012 - 0.093	NT	0.2
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.012 - 0.033	NT	0.1
Total	7331	1					

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
152 Piperonyl butoxide (insecticide)							
Apples	184	0			0.025 ^	8.0	-
Cantaloupe	99	0			0.010 ^	8	-
Carrots	184	0			0.005 - 0.010	NT	-
Cherries	275	0			0.010 - 0.022	8.0	-
Cucumbers	211	0			0.010 ^	NT	-
Grapes	741	10	1.3	0.023 - 0.79	0.010 - 0.014	8.0	-
Green Beans	720	0			0.010 - 0.013	8.0	-
Lettuce	216	0			0.010 ^	NT	-
Nectarines	96	0			0.010 ^	NT	-
Oranges	708	0			0.010 - 0.050	8.0	-
Peaches, Composite	536	1	0.2	0.037 ^	0.022 - 0.040	8.0	-
Peaches, Single Serving	534	1	0.2	0.16 ^	0.022 - 0.040	8.0	-
Pears, Canned	106	0			0.010 ^	8	-
Pineapples	364	10	2.7	0.017 - 0.023	0.010 - 0.014	8.0	-
Potatoes	369	0			0.008 - 0.010	0.25	-
Strawberries, Fresh (V-2)	518	2	0.4	0.083 - 0.79	0.010 - 0.050	NT	-
Strawberries, Frozen	37	0			0.010 - 0.050	NT	-
Sweet Bell Peppers (V-2)	694	2	0.3	0.022 - 0.058	0.010 - 0.013	NT	-
Tomatoes, Canned	369	0			0.010 - 0.050	8	-
Total	6961	26					
153 Pirimicarb (insecticide)							
Carrots	130	0			0.010 ^	NT	-
Cherries	199	0			0.020 ^	NT	-
Peaches, Composite (V-1)	536	1	0.2	0.033 ^	0.020 ^	NT	0.5
Peaches, Single Serving	534	1	0.2	0.033 ^	0.020 ^	NT	0.5
Total	1399	2					
154 Pirimiphos methyl (insecticide)							
Carrots	130	0			0.001 ^	NT	1
Cherries	199	0			0.001 ^	NT	2
Green Beans	426	0			0.003 ^	NT	0.5
Peaches, Composite	536	0			0.001 ^	NT	-
Peaches, Single Serving	534	0			0.001 ^	NT	-
Strawberries, Fresh	387	0			0.008 ^	NT	1
Strawberries, Frozen	7	0			0.008 ^	NT	1
Sweet Bell Peppers	527	0			0.003 ^	NT	1
Tomatoes, Canned	262	0			0.008 ^	NT	1
Total	3008	0					
155 Procyimdone (fungicide)							
Cantaloupe	99	0			0.015 ^	NT	-
Carrots	54	0			0.015 ^	NT	-
Cherries	76	0			0.015 ^	NT	10
Cucumbers	211	0			0.015 ^	NT	2
Grapes (V-2)	741	2	0.3	0.053 - 0.054	0.014 - 0.015	NT	5
Green Beans	209	0			0.015 ^	NT	1
Lettuce	216	0			0.015 ^	NT	5
Nectarines	96	0			0.015 ^	NT	-
Oranges	179	0			0.015 ^	NT	-
Pears, Canned	106	0			0.015 ^	NT	-
Pineapples	104	0			0.015 ^	NT	-
Potatoes	106	0			0.015 ^	NT	-
Strawberries, Fresh	518	0			0.010 - 0.015	NT	10
Strawberries, Frozen	37	0			0.010 - 0.015	NT	10
Sweet Bell Peppers	211	0			0.015 ^	NT	5
Tomatoes, Canned	369	0			0.010 - 0.015	NT	5
Total	3332	2					
156 Profenofos (insecticide)							
Carrots	130	0			0.001 ^	NT	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Cherries	199	0			0.001 ^	NT	-
Peaches, Composite	536	0			0.001 ^	NT	-
Peaches, Single Serving	534	0			0.001 ^	NT	-
Strawberries, Fresh	387	0			0.025 ^	NT	-
Strawberries, Frozen	7	0			0.025 ^	NT	-
Tomatoes, Canned	<u>262</u>	<u>0</u>			0.025 ^	NT	2
Total	2055	0					
157 Prometryn (herbicide)							
Carrots	184	0			0.007 - 0.010	0.1	-
Cucumbers	36	0			0.010 ^	NT	-
Green Beans	34	0			0.010 ^	NT	-
Lettuce	36	0			0.010 ^	NT	-
Oranges	18	0			0.010 ^	NT	-
Pineapples	35	0			0.010 ^	NT	-
Potatoes	36	0			0.010 ^	NT	-
Sweet Bell Peppers	<u>18</u>	<u>0</u>			0.010 ^	NT	-
Total	397	0					
158 Pronamide (herbicide)							
Apples	184	0			0.005 ^	0.1	-
Cantaloupe	406	0			0.007 - 0.014	NT	-
Carrots	184	0			0.006 - 0.007	NT	-
Cherries	275	0			0.007 - 0.012	0.1	-
Cucumbers	737	0			0.005 - 0.007	NT	-
Grapes	741	0			0.007 - 0.014	0.1	-
Green Beans	252	0			0.007 - 0.011	NT	-
Lettuce	740	0			0.007 - 0.018	1.0	-
Nectarines	345	0			0.002 - 0.007	0.1	-
Oranges	215	0			0.007 ^	NT	-
Peaches, Composite	536	0			0.012 ^	0.1	-
Peaches, Single Serving	534	0			0.012 ^	0.1	-
Pears, Canned	366	0			0.007 - 0.018	0.1	-
Pineapples	104	0			0.007 ^	NT	-
Potatoes	369	0			0.007 - 0.018	NT	-
Strawberries, Fresh	518	0			0.007 - 0.017	NT	-
Strawberries, Frozen	37	0			0.007 - 0.017	NT	-
Sweet Bell Peppers	738	0			0.007 - 0.011	NT	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.007 - 0.017	NT	-
Total	7650	0					
159 Propargite (insecticide)							
Apples	184	0			0.025 ^	NT	5
Cantaloupe	406	0			0.020 - 0.040	NT	-
Carrots	184	0			0.020 - 0.025	NT	-
Cherries (V-1)	275	1	0.4	0.083 ^	0.020 - 0.050	NT	-
Cucumbers	737	0			0.020 - 0.025	NT	0.5
Grapes	741	9	1.2	0.067 - 1.2	0.020 - 0.040	10	10
Green Beans (V-2)	720	2	0.3	0.012 ^	0.007 - 0.020	NT	20
Lettuce	740	0			0.008 - 0.020	NT	-
Nectarines	345	109	31.6	0.010 - 0.69	0.010 - 0.020	4	7
Oranges	744	1	0.1	0.011 ^	0.010 - 0.050	5	5
Peaches, Composite (V-10)	536	10	1.9	0.083 - 0.44	0.050 ^	NT	7
Peaches, Single Serving	534	6	1.1	0.083 - 0.40	0.050 ^	NT	7
Pears, Canned	366	0			0.008 - 0.020	NT	5
Pineapples	104	0			0.020 ^	NT	-
Potatoes	369	0			0.008 - 0.020	0.1	0.1
Strawberries, Fresh (V-2)	518	2	0.4	0.054 - 0.11	0.020 - 0.050	NT	7
Strawberries, Frozen	37	0			0.020 - 0.050	NT	7
Sweet Bell Peppers	738	0			0.007 - 0.020	NT	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.020 - 0.050	NT	2
Total	8647	140					
160 Propiconazole (fungicide)							

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Carrots	130	0			0.014 ^	NT	-
Cherries	245	73	29.8	0.025 - 0.26	0.015 - 0.03	1.0	1
Cucumbers	36	0			0.030 ^	NT	-
Grapes	34	0			0.030 ^	NT	0.5
Green Beans	34	0			0.030 ^	NT	-
Lettuce	36	0			0.030 ^	NT	-
Nectarines	284	21	7.4	0.005 - 0.11	0.005 - 0.030	1.0	1
Oranges	17	0			0.030 ^	NT	-
Peaches, Composite	536	22	4.1	0.025 - 0.11	0.015 ^	1.0	1
Peaches, Single Serving	534	22	4.1	0.025 - 0.20	0.015 ^	1.0	1
Pineapples	278	0			0.030 ^	0.1	-
Potatoes	35	0			0.030 ^	NT	-
Sweet Bell Peppers	36	0			0.030 ^	NT	-
Total	2235	138					
161 Propiconazole I (isomer of Propiconazole)							
Carrots	54	0			0.015 ^	NT	-
Cherries	13	8	61.5	0.020 - 0.052	0.012 - 0.015	1.0	1
Cucumbers	71	0			0.015 ^	NT	-
Green Beans	68	0			0.015 ^	NT	-
Lettuce	72	0			0.015 ^	NT	-
Nectarines	61	1	1.6	0.025 ^	0.015 ^	1.0	1
Oranges	72	0			0.015 ^	NT	-
Pineapples	86	0			0.015 ^	0.1	-
Potatoes	36	0			0.015 ^	NT	-
Strawberries, Fresh	34	0			0.015 ^	NT	-
Strawberries, Frozen	1	0			0.015 ^	NT	-
Sweet Bell Peppers	71	0			0.015 ^	NT	-
Total	639	9					
162 Propiconazole II (isomer of Propiconazole)							
Carrots	54	0			0.020 ^	NT	-
Cherries	13	13	100	0.030 - 0.15	0.018 - 0.020	1.0	1
Cucumbers	71	0			0.020 ^	NT	-
Green Beans	68	0			0.020 ^	NT	-
Lettuce	72	0			0.020 ^	NT	-
Nectarines	61	2	3.3	0.033 ^	0.020 ^	1.0	1
Oranges	72	0			0.020 ^	NT	-
Pineapples	86	0			0.020 ^	0.1	-
Potatoes	36	0			0.020 ^	NT	-
Strawberries, Fresh	34	0			0.020 ^	NT	-
Strawberries, Frozen	1	0			0.020 ^	NT	-
Sweet Bell Peppers	71	0			0.020 ^	NT	-
Total	639	15					
163 Pyridaben (insecticide)							
Apples	184	1	0.5	0.079 ^	0.025 ^	0.5	-
Total	184	1					
164 Pyriproxyfen (insecticide, growth regulator)							
Apples	184	0			0.025 ^	0.2	-
Total	184	0					
165 Quintozene-PCNB (fungicide) (parent of HCB, PCA and PCB)							
Apples	184	0			0.001 ^	NT	-
Cantaloupe	406	0			0.003 - 0.006	NT	-
Carrots	184	0			0.003 ^	NT	-
Cherries	275	0			0.003 ^	NT	-
Cucumbers (V-13)	737	13	1.8	0.002 - 0.030	0.001 - 0.003	NT	-
Grapes	142	0			0.003 ^	NT	-
Green Beans	720	37	5.1	0.005 - 0.017	0.003 - 0.005	0.1	-
Lettuce	740	0			0.003 - 0.004	NT	3
Nectarines	96	0			0.003 ^	NT	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Oranges	215	0			0.003 ^	NT	-
Peaches, Composite	530	0			0.003 ^	NT	-
Peaches, Single Serving	527	0			0.003 ^	NT	-
Pears, Canned	366	0			0.003 - 0.004	NT	-
Pineapples	104	0			0.003 ^	NT	-
Potatoes	369	2	0.5	0.058 - 0.098	0.003 - 0.004	0.1	0.2
Strawberries, Fresh	518	0			0.003 ^	NT	-
Strawberries, Frozen	37	0			0.003 ^	NT	-
Sweet Bell Peppers	738	0			0.003 - 0.006	0.1	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.003 ^	0.1	-
Total	7257	52					
166 Resmethrin (insecticide)							
Carrots	<u>130</u>	<u>0</u>			0.007 ^	3.0	-
Total	130	0					
167 Simazine (herbicide)							
Apples	184	0			0.025 ^	0.25	-
Cantaloupe	406	0			0.010 - 0.022	NT	-
Carrots	184	0			0.002 - 0.010	NT	-
Cherries	275	0			0.004 - 0.010	0.25	-
Cucumbers	737	0			0.010 - 0.025	NT	-
Grapes	741	0			0.010 - 0.022	0.25	-
Green Beans	252	0			0.010 - 0.026	NT	-
Lettuce	740	0			0.010 - 0.018	NT	-
Nectarines	96	0			0.010 ^	NT	-
Oranges	726	0			0.010 - 0.025	0.25	-
Peaches, Composite	536	0			0.004 ^	0.25	-
Peaches, Single Serving	534	0			0.004 ^	0.25	-
Pears, Canned	366	0			0.010 - 0.018	0.25	-
Pineapples	104	0			0.010 ^	NT	-
Potatoes	369	0			0.010 - 0.018	NT	-
Strawberries, Fresh	518	0			0.010 - 0.025	0.25	-
Strawberries, Frozen	37	0			0.010 - 0.025	0.25	-
Sweet Bell Peppers	738	0			0.010 - 0.026	NT	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.010 - 0.025	NT	-
Total	7912	0					
168 Spinosad (insecticide)							
Tomatoes, Canned	<u>131</u>	<u>0</u>			0.006 ^	0.4	-
Total	131	0					
169 Spinosad A (isomer of Spinosad)							
Nectarines	249	13	5.2	0.006 - 0.026	0.006 ^	0.2	-
Oranges	507	0			0.006 ^	0.3	-
Tomatoes, Canned	<u>152</u>	<u>0</u>			0.006 ^	0.4	-
Total	908	13					
170 Spinosad D (isomer of Spinosad)							
Nectarines	249	0			0.006 ^	0.2	-
Oranges	507	0			0.006 ^	0.3	-
Tomatoes, Canned	<u>152</u>	<u>0</u>			0.006 ^	0.4	-
Total	908	0					
171 Sulprofos (insecticide)							
Carrots	130	0			0.002 ^	NT	-
Cherries	199	0			0.003 ^	NT	-
Peaches, Composite	536	0			0.003 ^	NT	-
Peaches, Single Serving	<u>534</u>	<u>0</u>			0.003 ^	NT	-
Total	1399	0					
172 Tebuconazole (fungicide)							
Cantaloupe	99	0			0.015 - 0.020	NT	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Carrots	184	0			0.019 - 0.020	NT	-
Cherries	275	59	21.5	0.025 - 1.2	0.015 - 0.020	4.0	-
Cucumbers	211	0			0.015 - 0.020	NT	0.2
Grapes	741	35	4.7	0.025 - 0.85	0.015 - 0.056	5.0	-
Green Beans	191	0			0.015 - 0.020	NT	-
Lettuce	216	0			0.015 - 0.020	NT	-
Nectarines	345	33	9.6	0.013 - 0.11	0.008 - 0.020	1.0	-
Oranges	179	0			0.015 - 0.020	NT	-
Peaches, Composite	536	19	3.5	0.027 - 0.066	0.015 - 0.016	1.0	1
Peaches, Single Serving	534	12	2.2	0.027 - 0.090	0.015 - 0.016	1.0	1
Pears, Canned	106	0			0.015 - 0.020	NT	0.5
Pineapples	104	0			0.015 - 0.020	NT	-
Potatoes	106	0			0.020 ^	NT	-
Strawberries, Fresh	131	0			0.015 - 0.020	NT	-
Strawberries, Frozen	30	0			0.015 ^	NT	-
Sweet Bell Peppers	211	0			0.015 - 0.020	NT	0.5
Tomatoes, Canned	216	0			0.015 - 0.045	NT	0.2
Total	4415	158					
173 Tecnazene (fungicide)							
Carrots	130	0			0.005 ^	NT	-
Cherries	199	0			0.006 ^	NT	-
Peaches, Composite	536	0			0.002 - 0.006	NT	-
Peaches, Single Serving	534	0			0.002 - 0.006	NT	-
Total	1399	0					
174 TEPP (insecticide)							
Carrots	130	0			0.003 ^	NT	-
Cherries	199	0			0.003 ^	NT	-
Peaches, Composite	528	0			0.003 ^	NT	-
Peaches, Single Serving	526	0			0.003 ^	NT	-
Total	1383	0					
175 Terbacil (herbicide)							
Apples	184	0			0.025 ^	0.1	-
Cantaloupe	406	0			0.020 - 0.021	NT	-
Carrots	166	0			0.006 - 0.020	NT	-
Cherries	275	0			0.020 ^	NT	-
Cucumbers	737	0			0.020 - 0.025	NT	-
Grapes	142	0			0.020 ^	NT	-
Green Beans	256	0			0.020 - 0.031	NT	-
Lettuce	740	0			0.018 - 0.020	NT	-
Nectarines	96	0			0.020 ^	NT	-
Oranges	215	0			0.020 ^	NT	-
Peaches, Composite	536	0			0.020 ^	0.1	-
Peaches, Single Serving	534	0			0.020 ^	0.1	-
Pears, Canned	366	0			0.018 - 0.020	0.1	-
Pineapples	104	0			0.020 ^	NT	-
Potatoes	369	0			0.018 - 0.020	NT	-
Strawberries, Fresh	518	0			0.020 - 0.033	0.1	-
Strawberries, Frozen	37	0			0.020 - 0.033	0.1	-
Sweet Bell Peppers	738	0			0.020 - 0.031	NT	-
Tomatoes, Canned	369	0			0.020 - 0.033	NT	-
Total	6788	0					
176 Terbufos (insecticide)							
Apples	184	0			0.014 ^	NT	-
Cantaloupe	406	0			0.006 - 0.025	NT	-
Carrots	184	0			0.001 - 0.006	NT	-
Cherries	275	0			0.002 - 0.025	NT	-
Cucumbers	737	0			0.006 - 0.025	NT	-
Grapes	142	0			0.006 - 0.025	NT	-
Green Beans	720	0			0.002 - 0.025	NT	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Lettuce	740	0			0.006 - 0.025	NT	-
Nectarines	96	0			0.006 ^	NT	-
Oranges	215	0			0.006 - 0.025	NT	-
Peaches, Composite	536	0			0.002 ^	NT	-
Peaches, Single Serving	534	0			0.002 ^	NT	-
Pears, Canned	366	0			0.006 - 0.025	NT	-
Pineapples	104	0			0.006 ^	NT	-
Potatoes	369	0			0.006 - 0.015	NT	-
Strawberries, Fresh	518	0			0.006 - 0.025	NT	-
Strawberries, Frozen	37	0			0.006 - 0.025	NT	-
Sweet Bell Peppers	738	0			0.002 - 0.025	NT	-
Tomatoes, Canned	369	0			0.006 - 0.025	NT	-
Total	7270	0					
177 Terbufos sulfone (metabolite of Terbufos)							
Apples	184	0			0.007 ^	NT	-
Cantaloupe	406	0			0.004 - 0.006	NT	-
Carrots (V-1)	184	1	0.5	0.008 ^	0.001 - 0.004	NT	-
Cherries	275	0			0.003 - 0.004	NT	-
Cucumbers	737	0			0.004 - 0.007	NT	-
Grapes	142	0			0.004 ^	NT	-
Green Beans	720	0			0.002 - 0.004	NT	-
Lettuce	740	0			0.004 - 0.048	NT	-
Nectarines	96	0			0.004 ^	NT	-
Oranges	215	0			0.004 ^	NT	-
Peaches, Composite	536	0			0.003 ^	NT	-
Peaches, Single Serving	534	0			0.003 ^	NT	-
Pears, Canned	366	0			0.004 - 0.048	NT	-
Pineapples	104	0			0.004 ^	NT	-
Potatoes	369	0			0.004 - 0.048	NT	-
Strawberries, Fresh	518	0			0.004 - 0.010	NT	-
Strawberries, Frozen	37	0			0.004 - 0.010	NT	-
Sweet Bell Peppers	738	0			0.002 - 0.004	NT	-
Tomatoes, Canned	369	0			0.004 - 0.010	NT	-
Total	7270	1					
178 Tetrachlorvinphos (insecticide)							
Apples	184	0			0.010 ^	NT	-
Cantaloupe	406	0			0.004 - 0.016	NT	-
Carrots	184	0			0.002 - 0.004	NT	-
Cherries	275	0			0.003 - 0.004	NT	-
Cucumbers	737	0			0.004 - 0.010	NT	-
Grapes	142	0			0.004 ^	NT	-
Green Beans	720	0			0.004 ^	NT	-
Lettuce	740	0			0.004 - 0.008	NT	-
Nectarines	96	0			0.004 ^	NT	-
Oranges	215	0			0.004 ^	NT	-
Peaches, Composite	536	0			0.003 ^	NT	-
Peaches, Single Serving	534	0			0.003 ^	NT	-
Pears, Canned	366	0			0.004 - 0.008	NT	-
Pineapples	104	0			0.004 ^	NT	-
Potatoes	369	0			0.004 - 0.008	NT	-
Strawberries, Fresh	518	0			0.004 - 0.017	NT	-
Strawberries, Frozen	37	0			0.004 - 0.017	NT	-
Sweet Bell Peppers	738	0			0.004 ^	NT	-
Tomatoes, Canned	369	0			0.004 - 0.008	NT	-
Total	7270	0					
179 Tetradifon (insecticide)							
Apples	184	0			0.005 ^	5	-
Cantaloupe	406	0			0.008 - 0.011	1	-
Carrots	184	0			0.010 - 0.011	NT	-
Cherries	275	0			0.011 - 0.020	5	-
Cucumbers	737	0			0.005 - 0.011	1	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Grapes	741	0			0.008 - 0.011	5	-
Green Beans	252	0			0.009 - 0.011	NT	-
Lettuce	740	0			0.011 - 0.029	NT	-
Nectarines	345	0			0.001 - 0.011	5	-
Oranges	744	0			0.001 - 0.011	2	-
Peaches, Composite	536	0			0.006 - 0.020	5	-
Peaches, Single Serving	534	0			0.006 - 0.020	5	-
Pears, Canned	366	0			0.011 - 0.029	5	-
Pineapples	104	0			0.011 ^	NT	-
Potatoes	369	0			0.011 - 0.029	NT	-
Strawberries, Fresh	518	0			0.008 - 0.011	5	-
Strawberries, Frozen	37	0			0.008 - 0.011	5	-
Sweet Bell Peppers	738	0			0.009 - 0.011	NT	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.008 - 0.011	1	-
Total	8179	0					
180 Thiabendazole (fungicide)							
Apples	184	60	32.6	0.036 - 2.4	0.030 ^	10.0	10
Cantaloupe	408	48	11.8	0.042 - 0.39	0.025 - 0.03	15.0	-
Carrots	184	0			0.017 - 0.03	10	-
Cherries	275	0			0.030 ^	NT	-
Cucumbers	737	0			0.030 ^	NT	-
Grapes	741	0			0.030 ^	NT	-
Green Beans	702	0			0.009 - 0.030	NT	-
Lettuce	740	0			0.030 - 0.045	NT	-
Nectarines (V-1)	96	1	1.0	0.050 ^	0.030 ^	NT	-
Oranges	744	221	29.7	0.010 - 0.68	0.010 - 0.083	10	10
Peaches, Composite (V-7)	536	7	1.3	0.050 - 0.12	0.030 ^	NT	-
Peaches, Single Serving	534	6	1.1	0.050 - 0.17	0.030 ^	NT	-
Pears, Canned	366	0			0.030 - 0.045	10	10
Pineapples	104	0			0.030 ^	NT	-
Potatoes	369	10	2.7	0.088 - 4.1	0.030 - 0.045	10.0	15
Strawberries, Fresh	518	10	1.9	0.042 - 0.23	0.025 - 0.083	5.0	3
Strawberries, Frozen	37	0			0.030 - 0.083	5.0	3
Sweet Bell Peppers	738	0			0.009 - 0.030	NT	-
Tomatoes, Canned	<u>369</u>	<u>0</u>			0.030 - 0.083	NT	-
Total	8382	363					
181 Tri-Allate (herbicide)							
Cantaloupe	9	0			0.009 ^	NT	-
Cucumbers	14	0			0.009 ^	NT	-
Grapes	18	0			0.009 ^	NT	-
Green Beans	18	0			0.009 ^	NT	-
Lettuce	18	0			0.009 ^	NT	-
Oranges	18	0			0.009 ^	NT	-
Pears, Canned	18	0			0.009 ^	NT	-
Strawberries, Fresh	9	0			0.009 ^	NT	-
Strawberries, Frozen	9	0			0.009 ^	NT	-
Sweet Bell Peppers	14	0			0.009 ^	NT	-
Tomatoes, Canned	<u>18</u>	<u>0</u>			0.009 ^	NT	-
Total	163	0					
182 Triadimefon (fungicide)							
Apples	184	0			0.006 ^	1.0	-
Cantaloupe	406	0			0.022 - 0.030	0.3	0.1
Carrots	184	0			0.003 - 0.025	NT	-
Cherries	275	0			0.012 - 0.030	NT	-
Cucumbers	737	2	0.3	0.010 - 0.021	0.006 - 0.025	0.3	0.1
Grapes	741	0			0.022 - 0.025	1.0	0.5
Green Beans	702	0			0.025 - 0.043	NT	-
Lettuce	740	0			0.023 - 0.025	NT	-
Nectarines	345	0			0.006 - 0.025	4.0	-
Oranges	215	0			0.025 - 0.030	NT	-
Peaches, Composite (V-1)	536	1	0.2	0.020 ^	0.012 ^	NT	-

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
Peaches, Single Serving	534	1	0.2	0.020 ^	0.012 ^	NT	-
Pears, Canned	366	0			0.023 - 0.025	1.0	0.5
Pineapples	364	9	2.5	0.017 - 0.042	0.010 - 0.025	3.0	2
Potatoes	369	0			0.023 - 0.025	NT	-
Strawberries, Fresh	518	0			0.025 ^	NT	0.1
Strawberries, Frozen	37	0			0.025 ^	NT	0.1
Sweet Bell Peppers	738	0			0.025 - 0.043	NT	0.1
Tomatoes, Canned	369	0			0.025 - 0.030	NT	0.2
Total	8360	13					
183 Trifluralin (herbicide)							
Apples	184	0			0.006 ^	NT	-
Cantaloupe	406	0			0.017 - 0.030	0.05	-
Carrots	184	104	56.5	0.002 - 0.16	0.001 - 0.017	1.0	-
Cherries	275	0			0.001 - 0.017	0.05	-
Cucumbers	737	0			0.006 - 0.017	0.05	-
Grapes	741	0			0.017 - 0.030	0.05	-
Green Beans	701	0			0.017 - 0.068	0.05	-
Lettuce	740	0			0.008 - 0.017	0.05	-
Nectarines	345	0			0.010 - 0.017	0.05	-
Oranges	744	0			0.005 - 0.020	0.05	-
Peaches, Composite	536	0			0.001 ^	0.05	-
Peaches, Single Serving	534	0			0.001 ^	0.05	-
Pears, Canned	366	0			0.008 - 0.017	NT	-
Pineapples	104	0			0.017 ^	NT	-
Potatoes	369	0			0.008 - 0.017	0.05	-
Strawberries, Fresh	518	0			0.017 - 0.033	NT	-
Strawberries, Frozen	37	0			0.017 - 0.033	NT	-
Sweet Bell Peppers	738	0			0.017 - 0.068	0.05	-
Tomatoes, Canned	369	0			0.017 - 0.020	0.05	-
Total	8628	104					
184 Vernolate (herbicide)							
Potatoes	369	0			0.016 - 0.050	0.1	-
Total	369	0					
185 Vinclozolin (fungicide)							
Apples	184	0			0.002 ^	NT	1
Cantaloupe	406	0			0.009 - 0.010	NT	1
Carrots	184	0			0.004 - 0.010	NT	-
Cherries	275	0			0.002 - 0.010	25.0	5
Cucumbers	737	0			0.002 - 0.010	1.0	1
Grapes (V-1)	741	1	0.1	0.11 ^	0.009 - 0.010	NT	5
Green Beans	720	36	5.0	0.012 - 0.30	0.007 - 0.010	2.0	2
Lettuce	740	1	0.1	0.28 ^	0.010 - 0.014	10.0	5
Nectarines	345	0			0.002 - 0.010	25.0	-
Oranges	215	0			0.010 ^	NT	-
Peaches, Composite	536	0			0.002 ^	25.0	5
Peaches, Single Serving	534	0			0.002 ^	25.0	5
Pears, Canned	366	0			0.010 - 0.014	NT	1
Pineapples	104	0			0.010 ^	NT	-
Potatoes	369	0			0.010 - 0.014	NT	0.1
Strawberries, Fresh	518	14	2.7	0.037 - 0.92	0.007 - 0.010	10	10
Strawberries, Frozen	37	9	24.3	0.017 - 0.19	0.007 - 0.010	10	10
Sweet Bell Peppers	738	2	0.3	0.012 - 0.063	0.007 - 0.010	3.0	3
Tomatoes, Canned	369	0			0.007 - 0.010	NT	3
Total	8118	63					

KEY

^ Only one distinct detected concentration or LOD value was reported for the pair.

NT No tolerance level was set for that pesticide/commodity pair.

Pesticide / Commodity	Total Samples Screened	Samples with Detection	% of Samples with Detections	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL, ppm
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AL Numbers shown are Action Levels established by FDA and Codex Extraneous Maximum Residue Levels (EMRLs) for some pesticides. Under FQPA, responsibility for establishing tolerances in lieu of action levels has been transferred to EPA. In the interim, action levels are used.

EX Exempt from tolerance application.

(V) Residue was found where no tolerance was established by EPA. Following "V" are the number of occurrences.

(X) Residue was found which exceeds EPA tolerance or FDA action level. Following "X" are the number of occurrences.

For those pesticide/commodity pairs where the minimum detected value is less than the limit of quantitation (3 times the limit of detection), the reported values are estimates. In a few cases, this may apply to the maximum detected value.

Appendix F

Distribution of Residues for Peach Single Serving Survey

A special survey to address acute dietary risk assessment needs was conducted in 2000. Composite and corresponding single serving peach samples were analyzed for 100 pesticides plus 39 metabolites, degradates, and isomers. Upon receipt of composite peach samples for multiresidue analysis, an individual peach was randomly selected from each 5-pound sample, prepared, and analyzed according to PDP procedures.

Composite and corresponding single serving residue results are used by EPA and private contractors to develop and evaluate sample decomposing models. When validated, these models may be used to translate composite to single serving data for use in acute dietary risk assessments.

Appendix F shows the distribution of residues for all peach composite and single serving samples analyzed for 8 pesticides that had residue detections in at least 10 percent of the samples. This appendix also lists residue findings for those 8 pesticides for the top 25 samples with the highest number of multiple residue detections.

Refer to the Appendix E cover page for a definition of Codex MRLs/EMRLs.

**Distribution of Residues for Peach Composites and Single Servings
(Only Pesticides with Residue Detections in at least 10% of Samples)**

Pesticide	Comp or SS	Total Samples Screened	Samples with Detections	% of Samples with Detections	Range of Values Detected, ppm	LOD, ppm	EPA Tolerance, ppm	CODEX MRL/EMRL, ppm
Azinphos methyl	CO	536	222	41.4	0.010 - 0.35	0.006	2	2
	SS	534	218	40.8	0.010 - 0.65	0.006	2	2
Carbaryl	CO	536	84	15.7	0.010 - 2.4	0.006	10	10
	SS	534	79	14.8	0.010 - 2.7	0.006	10	10
Chlorpyrifos	CO	536	168	31.3	0.002 - 0.13	0.001	0.1	-
	SS	534	152	28.5	0.002 - 0.10	0.001	0.1	-
Dicloran	CO	536	85	15.9	0.003 - 2.5	0.002	20	15
	SS	534	82	15.4	0.003 - 1.9	0.002	20	15
Fenvalerate	CO	536	77	14.4	0.003 - 0.03	0.002	10	5
	SS	534	57	10.7	0.003 - 0.085	0.002	10	5
Iprodione	CO	536	340	63.4	0.025 - 8.9	0.015	20	10
	SS	534	339	63.5	0.025 - 19.0	0.015	20	10
Iprodione met. isomer	CO	536	210	39.2	0.042 - 1.5	0.025	20	-
	SS	534	196	36.7	0.042 - 1.8	0.025	20	-
Phosmet	CO	536	196	36.6	0.010 - 1.3	0.006	10	10
	SS	534	188	35.2	0.010 - 2.4	0.006	10	10

**Residue Findings for Peach Composites and Associated Single Servings
Top 25 Samples With Highest Number of Detections for Selected Pesticides
(Only Pesticides with Residue Detections in at least 10% of Samples)**

Sample # / Commodity		Concentration Detected, ppm							Phosmet
		Azinphos methyl	Carbaryl	Chlorpyrifos	Dicloran	Fenvalerate	Iprodione	Iprodione metabolite Isomer	
1.	Peaches, Composite	0.028	0.066	0.002	0.01	0.006	1.6	0.13	ND
	Peach, Single Serving	0.024	0.060	ND	0.003	0.003	1.4	0.13	ND
2.	Peaches, Composite	ND	1.3	0.004	1.1	ND	5.7	0.28	0.41
	Peach, Single Serving	ND	1.2	0.004	0.68	ND	3.8	0.13	0.44
3.	Peaches, Composite	0.12	0.010	ND	ND	0.003	7.2	0.51	0.010
	Peach, Single Serving	0.054	0.010	ND	ND	0.003	4.7	0.28	0.010
4.	Peaches, Composite	0.12	0.11	0.017	ND	ND	4.7	0.37	ND
	Peach, Single Serving	0.033	0.010	0.015	ND	ND	6.4	0.49	ND
5.	Peaches, Composite	0.022	ND	0.035	ND	ND	5.6	0.36	0.32
	Peach, Single Serving	0.020	ND	0.015	ND	ND	4.2	0.31	0.26
6.	Peaches, Composite	ND	0.39	ND	ND	0.007	2.1	ND	0.47
	Peach, Single Serving	0.010	0.37	ND	ND	0.011	3.5	0.13	1.0
7.	Peaches, Composite	0.033	ND	0.006	ND	0.003	3.2	0.13	0.010
	Peach, Single Serving	0.033	ND	0.020	ND	0.003	3.4	0.13	0.010
8.	Peaches, Composite	ND	0.44	0.002	1.1	ND	0.74	0.13	0.064
	Peach, Single Serving	ND	0.15	ND	0.72	ND	0.60	0.13	0.037

Concentration Detected, ppm

Sample # / Commodity	Azinphos methyl	Carbaryl	Chlorpyrifos	Dicloran	Fenvalerate	Iprodione	Iprodione metabolite Isomer	Phosmet
9. Peaches, Composite	0.046	ND	0.008	ND	0.003	1.9	0.32	0.010
Peach, Single Serving	0.042	ND	0.015	ND	0.003	0.96	0.13	0.010
10. Peaches, Composite	0.025	0.037	0.002	ND	0.003	1.8	0.13	ND
Peach, Single Serving	0.032	0.054	0.002	ND	0.016	1.0	0.13	ND
11. Peaches, Composite	0.034	0.010	0.002	ND	0.003	1.8	0.13	ND
Peach, Single Serving	0.010	0.042	0.003	ND	ND	1.5	0.13	ND
12. Peaches, Composite	0.045	ND	0.007	ND	0.003	1.6	0.13	0.010
Peach, Single Serving	0.041	ND	0.009	ND	0.010	1.2	0.13	0.010
13. Peaches, Composite	0.022	ND	0.011	ND	0.003	1.4	0.13	0.10
Peach, Single Serving	0.020	ND	0.037	0.009	0.003	1.2	ND	0.18
14. Peaches, Composite	0.13	ND	0.007	ND	0.013	1.2	0.13	0.010
Peach, Single Serving	0.046	ND	0.020	ND	0.006	0.80	0.13	ND
15. Peaches, Composite	0.083	ND	0.002	0.003	0.009	1.0	0.13	ND
Peach, Single Serving	0.12	ND	0.002	0.003	0.033	0.68	ND	ND
16. Peaches, Composite	0.083	ND	0.003	ND	0.003	0.95	0.13	0.030
Peach, Single Serving	0.059	ND	0.002	ND	0.003	0.94	0.13	0.035
17. Peaches, Composite	0.010	0.010	0.004	ND	ND	1.0	0.13	ND
Peach, Single Serving	0.010	0.010	0.006	ND	0.003	0.96	0.13	ND
18. Peaches, Composite	ND	0.95	0.004	2.5	ND	0.025	ND	0.25
Peach, Single Serving	ND	0.50	0.003	1.4	ND	0.025	ND	0.25
19. Peaches, Composite	0.041	ND	0.005	ND	0.026	3.3	0.33	ND
Peach, Single Serving	0.051	ND	0.006	ND	0.085	3.0	0.30	ND
20. Peaches, Composite	0.041	0.025	0.002	ND	ND	2.8	0.13	ND
Peach, Single Serving	0.010	0.052	0.002	ND	ND	3.1	0.13	ND
21. Peaches, Composite	0.063	ND	0.003	ND	ND	3.0	0.13	0.022
Peach, Single Serving	0.025	ND	ND	ND	ND	1.9	ND	0.010
22. Peaches, Composite	0.096	ND	0.004	ND	ND	2.3	0.13	0.052
Peach, Single Serving	0.13	ND	0.007	ND	ND	2.9	0.13	0.020
23. Peaches, Composite	0.010	ND	ND	ND	0.003	2.7	0.46	0.010
Peach, Single Serving	0.010	ND	ND	ND	0.003	2.1	0.31	0.010
24. Peaches, Composite	0.087	0.095	0.010	ND	ND	2.2	0.13	ND
Peach, Single Serving	0.066	0.13	0.008	ND	ND	2.7	0.13	ND
25. Peaches, Composite	0.030	ND	0.022	ND	ND	1.3	0.38	0.096
Peach, Single Serving	0.010	ND	0.012	ND	ND	1.7	0.74	0.19

CO - Composite Peaches
SS - Single Serving Peaches
ND - Non-Detection

Appendix G

Distribution of Residues by Pesticide in Peanut Butter

Appendix G shows residue detections for all peanut butter compounds tested, including range of values detected, range of Limits of Detection (LODs), and Environmental Protection Agency (EPA) and Codex Maximum Residue Limit/Extraneous Maximum Residue Limit (MRL/EMRL) tolerance references for each pair.

In 2000, PDP analyzed 716 peanut butter samples. A total of 186 samples (26%) were reported with residue detections. None of the residue detections exceeded the established tolerances.

Codex MRLs represent toxicological pesticide residue levels, based on Acceptable Daily Intakes (ADIs) permitted by the Joint (Food and Agriculture/World Health Organization -FAO/WHO) Meeting on Pesticide Residues (JMPR). The JMPR is an independently appointed panel of expert scientists. Similarly, EMRLs represent acceptable levels of persistent pesticides in the environment which are no longer registered for use in agriculture.

MRLs/EMRLs used in this appendix are values of pesticides and their metabolites, for the commodities either individually or part of a commodity group as they appear in the second addition of Volume B of the Codex Alimentarius Publication.

APPENDIX G. DISTRIBUTION OF RESIDUES BY PESTICIDE IN PEANUT BUTTER

Pesticide	Total Samples Screened	Samples with Detections	% of Samples w/ Detections	Range of Values Detected, ppm	LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL ppm
1 Naphthol	716				0.020 ^	5	-
3-Hydroxycarbofuran	716				0.010 ^	NT	-
Alachlor (herbicide)	716				0.003 ^	0.05	-
Aldicarb	716				0.010 ^	0.05	-
Aldicarb sulfone	716				0.014 ^	0.05	-
Aldicarb sulfoxide	716				0.012 ^	0.05	-
Aldrin	716				0.006 ^	0.05 ^{AL}	-
Benfluralin (herbicide)	716				0.004 ^	0.05	-
Carbaryl	716				0.005 ^	5	-
Carbofuran	716				0.010 ^	NT	-
Chlorpyrifos	716	50	6.9	0.005 - 0.013	0.003 ^	0.2	-
DDD p,p'	716				0.006 ^	0.2 ^{AL}	-
DDE p,p'	716	3	0.4	0.010 ^	0.006 ^	0.2 ^{AL}	-
DDT p,p'	716				0.008 ^	0.2 ^{AL}	-
Diazinon	716				0.011 ^	0.75	-
Diazinon oxygen analog	716				0.003 ^	NT	-
Dichlorvos-DDVP	716				0.005 ^	0.5	-
Dicloran	716	4	0.6	0.007 ^	0.004 ^	3.0	-
Dieldrin	716				0.006 ^	0.005 ^{AL}	-
Disulfoton	716				0.011 ^	0.75	0.1
Disulfoton sulfone	716				0.025 ^	0.75	0.1
Ethalfuralin	716				0.004 ^	0.05	-
Ethoprop	716				0.003 ^	0.02	-
Fenamiphos	716				0.003 ^	0.02	0.05
Fenamiphos sulfone	716				0.023 ^	0.02	0.05
Fenpropathrin	716				0.004 ^	0.01	-
Fenvalerate	716				0.014 ^	0.05	0.1
Heptachlor	716				0.003 ^	0.01 ^{AL}	-
Heptachlor epoxide	716				0.003 ^	0.01 ^{AL}	-
Iprodione	716				0.004 ^	0.5	-
Lambda cyhalothrin	716				0.005 ^	0.05	-
Malathion	716	53	7.4	0.010 - 0.031	0.006 ^	8	-
Malathion oxygen analog	716				0.006 ^	NT	-

Pesticide	Total Samples Screened	Samples with Detections	% of Samples w/ Detections	Range of Values Detected, ppm	LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL ppm
Metalaxyl	716	1	0.1	0.012 ^	0.007 ^	0.2	0.1
Methamidophos	716				0.009 ^	0.02	-
Methomyl	716				0.010 ^	0.1	0.1
Methoxychlor p,p'	716				0.018 ^	14	-
Metolachlor	716				0.006 ^	0.5	-
Monocrotophos	716				0.003 ^	0.05	0.05
Norflurazon	716				0.018 ^	0.05	-
Norflurazon desmethyl	716				0.012 ^	0.05	-
Oxamyl	716				0.012 ^	0.2	0.1
Parathion	716				0.025 ^	1	-
Parathion methyl	716	1	0.1	0.041 ^	0.010 ^	1	-
Parathion methyl o-analog	716				0.034 ^	NT	-
Parathion oxygen analog	716				0.008 ^	NT	-
Pendimethalin	716				0.010 ^	0.1	-
Pentachloroaniline-PCA	716	89	12.4	0.005 - 0.095	0.003 ^	1	-
Phorate	716				0.004 ^	0.1	0.1
Phorate sulfone	716				0.010 ^	0.1	0.1
Piperonyl butoxide	716	34	4.7	0.040 - 0.133	0.024 ^	8.0	-
Propargite	716				0.013 ^	0.1	0.1
Propiconazole	716				0.010 ^	0.2	0.05
Quintozene-PCNB	716	1	0.1	0.020 ^	0.004 ^	1	2
Tebuconazole	716				0.010 ^	0.1	0.05
Trifluralin	716				0.013 ^	0.05	-

^ = Only one distinct detected concentration or LOD value was reported for the pair.

NT = No tolerance level was set for that pesticide/commodity pair.

AL = Numbers shown are Action Levels established by FDA and Codex Extraneous Maximum Residue Levels (EMRLs) for some pesticides. Under FQPA, responsibility for establishing tolerances in lieu of action levels has been transferred to EPA. In the interim, action levels are used.

Appendix H

Distribution of Residues by Pesticide in Rice

Appendix H shows residue detections for all rice compounds tested, including range of values detected, range of Limits of Detection (LODs), and Environmental Protection Agency (EPA) and Codex Maximum Residue Limit/Extraneous Maximum Residue Limit (MRL/EMRL) tolerance references for each pair.

In 2000, PDP analyzed 178 rice samples. A total of 58 samples (33%) were reported with residue detections. None of the residue detections exceeded the established tolerances.

Codex MRLs represent toxicological pesticide residue levels, based on Acceptable Daily Intakes (ADIs) permitted by the Joint (Food and Agriculture/World Health Organization -FAO/WHO) Meeting on Pesticide Residues (JMPR). The JMPR is an independently appointed panel of expert scientists. Similarly, EMRLs represent acceptable levels of persistent pesticides in the environment which are no longer registered for use in agriculture.

MRLs/EMRLs used in this appendix are values of pesticides and their metabolites, for the commodities either individually or part of a commodity group as they appear in the second addition of Volume B of the Codex Alimentarius Publication.

APPENDIX H. DISTRIBUTION OF RESIDUES BY PESTICIDE IN RICE

Pesticide	Total Samples Screened	Samples with Detections	% of Samples w/ Detections	Range of Values Detected, ppm	LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL ppm
3-Hydroxycarbofuran	178				0.013 ^	0.2	-
Aldicarb	178				0.009 ^	NT	-
Aldicarb sulfone	178				0.011 ^	NT	-
Aldicarb sulfoxide	178				0.011 ^	NT	-
Carbaryl	178	3	1.7	0.010 - 0.040	0.006 ^	5.0	5
Carbofuran	178				0.012 ^	0.2	-
Carboxin (fungicide)	178				0.008 ^	0.2	-
Chlorpyrifos methyl	178	1	0.6	0.003 ^	0.002 ^	6.0	0.1
Clomazone (herbicide)	178				0.003 ^	0.02	-
DDE p,p'	178				0.004 ^	NT	0.1
Dieldrin	178				0.008 ^	0.02 ^{AL}	-
Dimethomorph	178				0.007 ^	0.05	-
Disulfoton	178				0.004 ^	0.75	0.5
Disulfoton sulfone	178				0.013 ^	0.75	0.5
Fenvalerate	178				0.012 ^	0.05	-
Fludioxonil	178	1	0.6	0.010 ^	0.006 ^	0.02	-
Fluridone	178				0.004 ^	0.1	-
Flutolanil (fungicide)	178				0.002 ^	7.0	-
Heptachlor epoxide	178				0.004 ^	0.01 ^{AL}	0.02
Iprodione	178				0.010 ^	10.0	-
Lambda cyhalothrin	178				0.006 ^	1.0	-
Lindane-BHC gamma	178				0.008 ^	0.1	-
Malathion	178	31	17.4	0.008 - 0.13	0.005 ^	8.0	-
Malathion oxygen analog	178				0.006 ^	NT	-
Metalaxyl	178				0.025 ^	0.1	-
Methomyl	178				0.009 ^	NT	-
Methoxychlor p,p'	178	6	3.4	0.017 ^	0.010 ^	2.0	-
Metolachlor	178				0.003 ^	0.1	-
Molinate (herbicide)	178				0.008 ^	0.1	-
Oxadixyl	178	2	1.1	0.033 ^	0.020 ^	0.1	-
Oxamyl	178				0.018 ^	NT	-
Parathion	178				0.036 ^	1	-

Pesticide	Total Samples Screened	Samples with Detections	% of Samples w/ Detections	Range of Values Detected, ppm	LODs, ppm	EPA Tolerance Level, ppm	Codex MRL/EMRL ppm
Parathion oxygen analog	178				0.040 ^	NT	-
Pendimethalin	178				0.009 ^	0.05	-
Piperonyl butoxide	178	24	13.5	0.033 - 0.20	0.020 ^	20	-
Propanil (herbicide)	178				0.002 ^	2	-
Propiconazole	178				0.017 ^	0.1	-
TCMTB (fungicide)	178				0.010 ^	0.1	-
Thiobencarb (herbicide)	178				0.005 ^	0.2	-

^ = Only one distinct detected concentration or LOD value was reported for the pair.

NT = No tolerance level was set for that pesticide/commodity pair.

AL = Numbers shown are Action Levels established by FDA and Codex Extraneous Maximum Residue Levels (EMRLs) for some pesticides. Under FQPA, responsibility for establishing tolerances in lieu of action levels has been transferred to EPA. In the interim, action levels are used.

Appendix I

Distribution of Residues by Pesticide in Poultry

Appendix I shows residue detections for all poultry compounds tested, including range of values detected, range of Limits of Detection (LODs), and Environmental Protection Agency (EPA) and Codex Maximum Residue Limit/Extraneous Maximum Residue Limit (MRL/EMRL) tolerance references for each pair.

In 2000, poultry tissue samples were analyzed which included 476 adipose samples, 480 liver samples, and 145 muscle samples. Of the 476 adipose samples analyzed, a total of 29 samples (6%) were reported with residue detections. One sample contained residue that exceeded the established EPA tolerance and 3 samples contained residues for which no EPA tolerance was established. A total of four samples (less than 1%) of the 480 liver samples analyzed were reported with residue detections. All 4 samples contained residue for which no EPA tolerance was established. Of the 145 muscle samples analyzed, a total of 2 samples (1%) were reported with residue detections. One sample contained residue for which no EPA tolerance was established.

Codex MRLs represent toxicological pesticide residue levels, based on Acceptable Daily Intakes (ADIs) permitted by the Joint (Food and Agriculture/World Health Organization -FAO/WHO) Meeting on Pesticide Residues (JMPR). The JMPR is an independently appointed panel of expert scientists. Similarly, EMRLs represent acceptable levels of persistent pesticides in the environment which are no longer registered for use in agriculture.

MRLs/EMRLs used in this appendix are values of pesticides and their metabolites, for the commodities either individually or part of a commodity group as they appear in the second addition of Volume B of the Codex Alimentarius Publication.

APPENDIX I. DISTRIBUTION OF RESIDUES BY PESTICIDE IN POULTRY

Pesticide	Total Samples Screened	Samples with Detections	% of Samples w/ Detections	Range of Values Detected, ppb	LODs, ppb	EPA Tolerance Level, ppb	Codex MRL/EMRL ppb
3-Hydroxycarbofuran							
Liver	480				4.8 - 5.0	NT	---
Acephate							
Adipose (X-1)	476	1	0.2	112.1	6.9 ^	100	100
Liver	479				6.9 ^	100	---
Muscle	145				6.9 ^	100	100
Aldicarb							
Liver	480				3.6 - 4.0	NT	---
Aldicarb sulfone							
Liver (V-1)	480	1	0.2	4.3 ^	2.0 - 2.2	NT	---
Aldicarb sulfoxide							
Liver	480				3.5 - 4.0	NT	---
Atrazine							
Adipose	476				6.8 ^	20	---
Muscle	145				6.8 ^	20	---
Azinphos methyl							
Adipose	476				9.8 ^	NT	---
Liver	479				9.8 ^	NT	---
Muscle	145				9.8 ^	NT	---
Azinphos methyl oxygen analog (metabolite of Azinphos methyl)							
Adipose	476				29.5 ^	NT	---
Liver	479				29.5 ^	NT	---
Muscle	145				30.0 ^	NT	---
BHC alpha							
Adipose	476				2.5 ^	300	---
BHC beta							
Adipose	476				4.8 ^	300	---
Bifenthrin							
Muscle	145	1	0.7	9.1 ^	0.60 ^	50	50
Captan							
Adipose	476				30.7 ^	NT	---
Carbaryl							
Liver	480				3.5 - 4.0	NT	---
Carbofuran							
Liver	480				6.0 - 6.1	NT	---

Pesticide	Total Samples Screened	Samples with Detections	% of Samples w/ Detections	Range of Values Detected, ppb	LODs, ppb	EPA Tolerance Level, ppb	Codex MRL/EMRL ppb
Carbophenothion							
Adipose	476				8.1 ^	NT	---
Chlordane cis							
Adipose	476				2.6 ^	300 ^{AL}	500
Chlordane trans							
Adipose	476				2.3 ^	300 ^{AL}	500
Chlorfenvinphos alpha							
Adipose	476				12.0 ^	5	---
Chlorpropham							
Adipose	476				10.0 ^	NT	---
Muscle	145				10.0 ^	NT	---
Chlorpyrifos							
Adipose	476				9.8 ^	100	100
Liver	479				9.8 ^	100	---
Muscle	145				9.8 ^	100	100
Chlorpyrifos methyl							
Adipose	476				7.0 ^	500	50
Liver	479				7.0 ^	500	---
Muscle	145				7.0 ^	500	50
Chlorpyrifos methyl oxygen analog (metabolite of Chlorpyrifos methyl)							
Adipose	476				18.1 ^	500	---
Liver	479				18.1 ^	500	---
Coumaphos							
Adipose	476				8.8 ^	NT	---
Liver	479				8.8 ^	NT	---
Muscle	145				8.8 ^	NT	---
Coumaphos oxygen analog							
Adipose	476				14.0 ^	NT	---
Liver	479				14.0 ^	NT	---
Muscle	145				14.0 ^	NT	---
Cyfluthrin							
Muscle	145				3.0 ^	100	---
DDD p,p'							
Adipose	476				3.5 ^	5000 ^{AL}	---
DDE p,p'							
Adipose	476	10	2.1	4.0 ^	2.4 ^	5000 ^{AL}	---
DDT p,p'							
Adipose	476				6.9 ^	5000 ^{AL}	---

Pesticide	Total Samples Screened	Samples with Detections	% of Samples w/ Detections	Range of Values Detected, ppb	LODs, ppb	EPA Tolerance Level, ppb	Codex MRL/EMRL ppb
Diazinon							
Adipose (V-2)	476	2	0.4	45.0 ^	9.4 ^	NT	---
Liver (V-1)	479	1	0.2	11.0 ^	9.4 ^	NT	---
Muscle (V-1)	145	1	0.7	19.0 ^	9.4 ^	NT	20
Diazinon oxygen analog							
Adipose	476				10.0 ^	NT	---
Liver	479				10.0 ^	NT	---
Muscle	145				10.0 ^	NT	---
Dichlorvos (DDVP)							
Adipose	476				6.3 ^	50	---
Liver	479				6.3 ^	50	---
Muscle	145				6.3 ^	50	50
Dicofol p,p'							
Adipose	476				19.1 ^	NT	---
Dicofol p,p'							
Muscle	145				1.6 ^	NT	100
Dieldrin							
Adipose	476	18	3.8	4.8 ^	2.9 ^	300 ^{AL}	---
Difenoconazole (fungicide)							
Muscle	145				3.0 ^	50	---
Dimethoate							
Adipose	476				7.6 ^	20	---
Liver	479				6.7 - 7.7	20	---
Muscle	145				7.6 ^	20	---
Endosulfan I							
Adipose	476				2.7 ^	NT	---
Endosulfan II							
Adipose	476				3.0 ^	NT	---
Endosulfan sulfate							
Adipose	476				3.7 ^	NT	---
Endrin							
Adipose	476				3.8 ^	NT	100
Esfenvalerate							
Muscle	145				3.0 ^	30	---
Ethalfuralin							
Adipose	476				3.0 ^	NT	---
Muscle	145				1.2 ^	NT	---

Pesticide	Total Samples Screened	Samples with Detections	% of Samples w/ Detections	Range of Values Detected, ppb	LODs, ppb	EPA Tolerance Level, ppb	Codex MRL/EMRL ppb
Ethion							
Adipose	476				4.7 ^	NT	---
Liver	479				4.7 ^	NT	---
Muscle	145				4.7 ^	NT	---
Ethion di oxon							
Adipose	476				8.3 ^	NT	---
Liver	479				8.3 ^	NT	---
Muscle	145				8.3 ^	NT	---
Ethion mono oxon							
Adipose (V-1)	476	1	0.2	7.2 ^	5.4 ^	NT	---
Liver	479				5.4 ^	NT	---
Muscle	145				5.4 ^	NT	---
Etridiazole (fungicide)							
Adipose	476				5.2 ^	100	---
Muscle	145				2.7 ^	100	---
Fenitrothion							
Adipose	476				10.3 ^	NT	---
Liver	479				10.3 ^	NT	---
Fenpropathrin							
Muscle	145				0.67 ^	50	20
Fenthion							
Adipose	476				10.0 ^	100	---
Liver	479				10.0 ^	100	---
Muscle	145				10.0 ^	100	---
Fenthion sulfone (metabolite of Fenthion)							
Adipose	476				8.6 ^	100	---
Liver	479				8.6 ^	100	---
Muscle	145				8.6 ^	100	---
Fenvalerate							
Muscle	145				1.0 ^	NT	---
Fluvalinate (insecticide)							
Muscle	145				2.3 ^	10	---
Heptachlor							
Adipose	476				2.8 ^	200 ^{AL}	---
Heptachlor epoxide							
Adipose	476				2.7 ^	200 ^{AL}	---
Hexachlorobenzene-HCB							
Adipose	476				1.3 ^	NT	---

Pesticide	Total Samples Screened	Samples with Detections	% of Samples w/ Detections	Range of Values Detected, ppb	LODs, ppb	EPA Tolerance Level, ppb	Codex MRL/EMRL ppb
Iprodione							
Adipose	476				41.6 ^	3500	---
Liver	479				41.6 ^	5000	---
Muscle	145				2.7 ^	1000	---
Isofenphos (insecticide)							
Adipose	476				12.0 ^	NT	---
Liver	479				12.0 ^	NT	---
Muscle	145				12.0 ^	NT	---
Lindane-BHC gamma							
Adipose	476	1	0.2	3.3 ^	2.0 ^	4000	---
Linuron							
Adipose	476				33.4 ^	NT	---
Malathion							
Adipose	476				12.0 ^	4000	---
Liver	479				12.0 ^	4000	---
Muscle	145				12.0 ^	4000	---
Malathion oxygen analog							
Adipose	476				13.0 ^	NT	---
Liver	479				13.0 ^	NT	---
Muscle	145				13.0 ^	NT	---
Methamidophos							
Adipose	476				8.7 ^	20	---
Liver	479				8.7 ^	20	---
Muscle	145				8.7 ^	20	---
Methidathion							
Adipose	476				10.0 ^	50	20
Liver	479				10.0 ^	50	---
Muscle	145				10.0 ^	50	20
Methiocarb							
Liver (V-2)	480	2	0.4	5.9 - 11.9	3.8 - 4.0	NT	---
Methomyl							
Liver	480				2.9 - 3.0	NT	---
Methoxychlor p,p'							
Adipose	476				12.9 ^	NT	---
Metribuzin							
Adipose	476				2.6 ^	700	---
Liver	479				2.6 ^	700	---
Muscle	145				1.5 ^	700	---

Pesticide	Total Samples Screened	Samples with Detections	% of Samples w/ Detections	Range of Values Detected, ppb	LODs, ppb	EPA Tolerance Level, ppb	Codex MRL/EMRL ppb
Myclobutanil							
Adipose	476				29.9 ^	20	---
Liver	479				29.9 ^	20	---
Muscle	145				1.6 ^	20	10
Nonachlor cis (insecticide)							
Adipose	476				2.7 ^	300	---
Nonachlor trans							
Adipose	476				2.9 ^	300	---
Omethoate							
Adipose	476				13.5 ^	20	---
Liver	479				13.5 ^	20	---
Muscle	145				14.0 ^	20	---
Oxychlorane							
Adipose	476				2.7 ^	300 ^{AL}	500
Oxyfluorfen							
Adipose	476				3.3 ^	50	---
Muscle	145				0.67 ^	50	---
Parathion							
Adipose	476				10.4 ^	NT	---
Liver	479				10.4 ^	NT	---
Muscle	145				10.0 ^	NT	---
Parathion methyl							
Adipose	476				9.4 ^	NT	---
Liver	479				9.4 ^	NT	---
Muscle	145				9.4 ^	NT	---
Parathion methyl oxygen analog							
Adipose	476				4.0 ^	NT	---
Liver	479				4.0 ^	NT	---
Muscle	145				4.0 ^	NT	---
Parathion oxygen analog							
Adipose	476				10.9 ^	NT	---
Liver	479				10.9 ^	NT	---
Muscle	145				11.0 ^	NT	---
Permethrin cis							
Adipose	476				30.2 ^	150	---
Muscle	145				2.0 ^	50	100
Permethrin trans							
Adipose	476				9.9 - 10.3	150	---
Muscle	145				30.0 ^	50	100

Pesticide	Total Samples Screened	Samples with Detections	% of Samples w/ Detections	Range of Values Detected, ppb	LODs, ppb	EPA Tolerance Level, ppb	Codex MRL/EMRL ppb
Phorate							
Adipose	476				7.0 ^	50	---
Liver	479				7.0 ^	50	---
Muscle	145				7.0 ^	50	---
Phorate oxygen analog							
Adipose	476				6.3 ^	NT	---
Liver	479				6.3 ^	NT	---
Muscle	145				6.3 ^	NT	---
Phorate sulfone							
Adipose	476				8.6 ^	50	---
Liver	479				8.6 ^	50	---
Muscle	145				8.6 ^	50	---
Phorate sulfoxide							
Adipose	476				16.7 ^	50	---
Liver	479				16.7 ^	50	---
Muscle	145				17.0 ^	50	---
Phosalone							
Adipose	476				8.8 ^	NT	---
Liver	479				8.8 ^	NT	---
Phosmet							
Adipose (V-1)	476	1	0.2	80.7 ^	9.0 ^	NT	---
Liver	479				9.0 ^	NT	---
Muscle	145				9.0 ^	NT	---
Pirimiphos methyl							
Adipose	476				9.6 ^	200	---
Liver	479				9.6 ^	2000	---
Muscle	145				9.6 ^	2000	---
Profenofos							
Adipose	476				9.3 - 10.7	50	---
Liver	479				9.3 - 10.8	50	---
Muscle	145				9.3 ^	50	---
Pronamide							
Adipose	476				5.7 ^	20	---
Liver	479				5.7 ^	200	---
Muscle	145				1.4 ^	20	---
Propargite							
Adipose	476				33.0 ^	100	---
Liver	479				33.0 ^	100	---
Muscle	145				33.0 ^	100	100

Pesticide	Total Samples Screened	Samples with Detections	% of Samples w/ Detections	Range of Values Detected, ppb	LODs, ppb	EPA Tolerance Level, ppb	Codex MRL/EMRL ppb
Propham (herbicide)							
Liver	479				5.6 ^	NT	---
Muscle	145				5.6 ^	NT	---
Propiconazole							
Adipose	289				5.7 ^	100	---
Liver	479				15.4 ^	200	---
Muscle	145				1.0 ^	100	50
Simazine							
Adipose	476				13.4 ^	20	---
Muscle	145				13.0 ^	20	---
Sulprofos							
Muscle	145				15.0 ^	NT	---
Tetrachlorvinphos							
Adipose	476				8.6 ^	750	---
Liver	479				8.6 ^	NT	---
Muscle	145				8.6 ^	NT	---
Thiobencarb							
Adipose	220				3.1 ^	200	---
Liver	479				6.4 ^	200	---
Muscle	145				6.4 ^	200	---
Triadimefon							
Adipose	476				5.2 ^	40	---
Muscle	145				0.40 ^	40	50
Triadimenol (fungicide)							
Adipose	476				14.4 ^	10	---
Muscle	145				14.0 ^	10	50
Triflumizole (fungicide)							
Adipose	476				10.8 ^	50	---
Muscle	145				1.0 ^	50	---

^ = Only one distinct detected concentration or LOD value was reported for the pair.

NT = No tolerance level was set for that pesticide/commodity pair.

AL = Numbers shown are Action Levels established by FDA and Codex Extraneous Maximum Residue Levels (EMRLs) for some pesticides. Under FQPA, responsibility for establishing tolerances in lieu of action levels has been transferred to EPA. In the interim, action levels are used.

X = Residue was found which exceeds EPA tolerance or FDA action level. Following "X" are the number of occurrences.

V = Residue was found where no tolerance was established by EPA. Following "V" are the number of occurrences.

Appendix J

National Estimates for Concentration Percentiles vs. Tolerance

(Pairs With Residue Detections in at Least 10 Percent of Samples)

Appendix I shows 84 pesticide/commodity pairs (including metabolites, isomers, and degradates) with detections in at least 10 percent of the samples tested. Concentrations detected are arranged in percentiles. The 90th percentile is compared to the Environmental Protection Agency tolerance established for each pesticide/commodity pair.

The meaning of a percentile can be most easily explained through an example. For the azinphos methyl/cherries, the 50th percentile, or median, is estimated to be 0.014 ppm. This means that PDP estimates that at least 50 percent of cherries available to U.S. consumers had azinphos methyl residues of 0.014 ppm or less, while at least 50 percent had residues of 0.014 ppm or more. Similarly, the 75th percentile (or the upper quartile) for this pair is estimated to be 0.037 ppm, which means that at least 75 percent of cherries had residues of 0.037 ppm or less, while at least 25 percent had residues of 0.037 ppm or more. Finally, the 90th percentile (or the last decile) is estimated to be 0.080 ppm, meaning that at least 90 percent of all cherries had azinphos methyl residues of 0.080 ppm or less, while at least 10 percent had residues of 0.080 ppm or more.

Percent detections and percentiles for apples, cantaloupe, carrots, cherries, cucumbers, grapes, green beans, lettuce, nectarines, oranges, peaches, potatoes, strawberries, and sweet bell peppers were weighted to reflect 1998 Agricultural Marketing Service marketing data.

**APPENDIX J. NATIONAL ESTIMATES FOR CONCENTRATION PERCENTILES vs. TOLERANCE
(Pairs With Residue Detections in at Least 10 Percent of Samples)**

Commodity / Pesticide	% of Samples with Detections	Mean (ppm) **		Percentiles			Ratio of 90th Percentile to Tolerance
		Lower	Upper	50th	75th	90th	
1 Apples (W) (October through December only)							
Azinphos methyl	42.6	0.024	0.030	*	0.027	0.081	0.054
Captan	13.4	0.022	0.032	*	*	0.030	0.001
Chlorpyrifos	11.6	0.004	0.007	*	*	0.008	0.005
Diphenylamine (DPA)	35.9	0.214	0.230	*	0.096	0.940	0.094
Phosmet	11.6	0.009	0.021	*	*	0.018	0.002
Thiabendazole	33.6	0.170	0.189	*	0.120	0.550	0.055
2 Cantaloupes (W) (January through June only)							
Endosulfan sulfate	34.1	0.006	0.009	*	0.009	0.020	0.010
Mathamidophos	7.5	0.005	0.009	*	*	*	*
Thiabendazole	9.1	0.012	0.039	*	*	*	*
3 Carrots (W) (October through December only)							
DDE p,p'	22.4	0.003	0.006	*	*	0.014	0.005
Iprodione	31.7	0.009	0.017	*	0.014	0.029	0.006
Linuron	10.9	0.009	0.034	*	*	0.035	0.035
Trifluralin	56.5	0.017	0.020	0.011	0.031	0.049	0.049
4 Cherries (W) (May through August only¹)							
Azinphos methyl	62.1	0.030	0.032	0.014	0.037	0.080	0.040
Carbaryl	43.8	0.078	0.082	*	0.045	0.200	0.020
iprodione	28.2	0.148	0.160	*	0.067	0.630	0.032
Iprodione metabolite isomer	10.0	0.012	0.034	*	*	0.029	0.001
Malathion	16.5	0.001	0.004	*	*	0.005	0.001
Myclobutanil	51.0	0.025	0.030	0.006	0.036	0.080	0.016
Propiconazole	30.0	0.020	0.033	*	0.028	0.070	0.070
Tebuconazole	19.1	0.023	0.037	*	*	0.063	0.016
5 Cucumbers (W)							
Dieldrin	17.0	0.003	0.006	*	*	0.006	0.057
Endosulfan I	41.4	0.009	0.011	*	0.013	0.027	0.014
Endosulfan II	33.8	0.006	0.009	*	0.008	0.017	0.009
Endosulfan sulfate	53.4	0.015	0.018	0.008	0.026	0.044	0.022
Metalaxyl	12.8	0.004	0.013	*	*	0.019	0.019
Methamidiphos	10.6	0.011	0.015	*	*	0.004	0.004
6 Grapes (W)							
Captan	22.5	0.028	0.037	*	*	0.095	0.002
Dimethoate	9.7	0.009	0.016	*	*	*	*
Iprodione	24.9	0.046	0.061	*	*	0.150	0.003
Myclobutanil	23.6	0.019	0.044	*	*	0.071	0.071

Commodity / Pesticide	% of Samples with Detections	Mean (ppm) **		Percentiles			Ratio of 90th Percentile to Tolerance
		Lower	Upper	50th	75th	90th	
Omethoate	11.3	0.006	0.017	*	*	0.016	0.016
7 Green Beans (W)							
Acephate	26.3	0.072	0.074	*	0.006	0.270	0.090
Endosulfan I	18.3	0.007	0.012	*	*	0.019	0.010
Endosulfan II	12.3	0.004	0.009	*	*	0.011	0.006
Endosulfan sulfate	24.7	0.017	0.024	*	*	0.069	0.035
Methamidiphos	26.5	0.026	0.028	*	0.005	0.100	5.000
8 Lettuce (W)							
Acephate	15.3	0.003	0.007	*	*	0.009	0.001
9 Nectarines (W) (July through September only²)							
Azinphos methyl	13.7	0.005	0.008	*	*	0.009	0.005
Carbaryl	14.9	0.030	0.033	*	*	0.025	0.002
Dicloran	31.2	0.041	0.043	*	0.006	0.093	0.005
Fenbuconazole	15.2	0.007	0.024	*	*	0.035	0.018
Fludioxonil	22.4	0.057	0.069	*	*	0.290	0.058
Formetanate hydrochloride	15.3	0.029	0.072	*	*	0.158	0.039
Iprodione	68.7	0.340	0.344	0.059	0.400	1.000	0.050
Phosmet	48.1	0.029	0.030	*	0.033	0.100	0.020
Propargite	31.6	0.060	0.069	*	0.063	0.230	0.058
10 Oranges (W)							
Imazalil	61.3	0.042	0.048	0.015	0.044	0.140	0.014
Thiabendazole	31.0	0.031	0.041	*	0.017	0.110	0.011
11 Peaches (W) (January through September only)							
Azinphos methyl	17.3	0.008	0.013	*	*	0.031	0.016
Carbaryl	18.5	0.065	0.070	*	*	0.200	0.020
Chlorpyrifos	15.9	0.001	0.002	*	*	0.003	0.030
Dicloran	26.6	0.058	0.059	*	0.003	0.092	0.005
Fenvalerate	8.9	0.001	0.002	*	*	*	*
Iprodione	47.7	0.309	0.316	*	0.290	1.100	0.055
Iprodione metabolite isomer	23.0	0.065	0.127	*	*	0.200	0.010
Phosmet	54.0	0.052	0.055	0.011	0.052	0.160	0.016
12 Potatoes (W) (July through December only)							
Chlopropham	64.8	0.660	0.665	0.042	0.380	2.200	0.044

Commodity / Pesticide	% of Samples with Detections	Mean (ppm) **		Percentiles			Ratio of 90th Percentile to Tolerance
		Lower	Upper	50th	75th	90th	
13 Rice							
Malathion	17.4	0.004	0.008	*	*	0.015	0.002
Piperonyl butoxide	13.5	0.007	0.024	*	*	0.036	0.002
14 Strawberries (W) (January through September only)							
Benomyl	16.8	0.056	0.098	*	*	0.170	0.034
Captan	57.1	0.345	0.352	0.057	0.410	1.000	0.040
Carbaryl	18.0	0.097	0.104	*	*	0.140	0.014
Iprodione	44.0	0.219	0.243	*	0.250	0.720	0.048
Malathion	19.1	0.006	0.011	*	*	0.020	0.002
Methomyl	11.5	0.054	0.068	*	*	0.042	0.021
Myclobutanil	14.3	0.024	0.081	*	*	0.097	0.193
15 Sweet Bell Peppers (W)							
Acephate	20.8	0.043	0.045	*	*	0.170	0.043
Chlorpyrifos	13.8	0.011	0.014	*	*	0.022	0.022
Endosulfan I	14.0	0.006	0.011	*	*	0.015	0.008
Endosulfan II	16.7	0.009	0.014	*	*	0.021	0.011
Endosulfan sulfate	13.4	0.004	0.012	*	*	0.018	0.009
Metalaxyl	12.6	0.006	0.016	*	*	0.022	0.022
Methamidiphos	30.1	0.021	0.023	*	0.007	0.076	0.076
Methomyl	16.9	0.011	0.016	*	*	0.027	0.014

¹ Captures over 98 percent of the annual arrivals.

² Captures over 65 percent of the annual arrivals.

* The percentile value is estimated to be below the Limit of Detection (LOD)

** The mean is estimated with a range of values. The lower bound is calculated with non-detections valued at zero. The upper bound is calculated using the LOD.

Appendix K

Cumulative Distributions of Residues for Selected Pesticide/Commodity Pairs

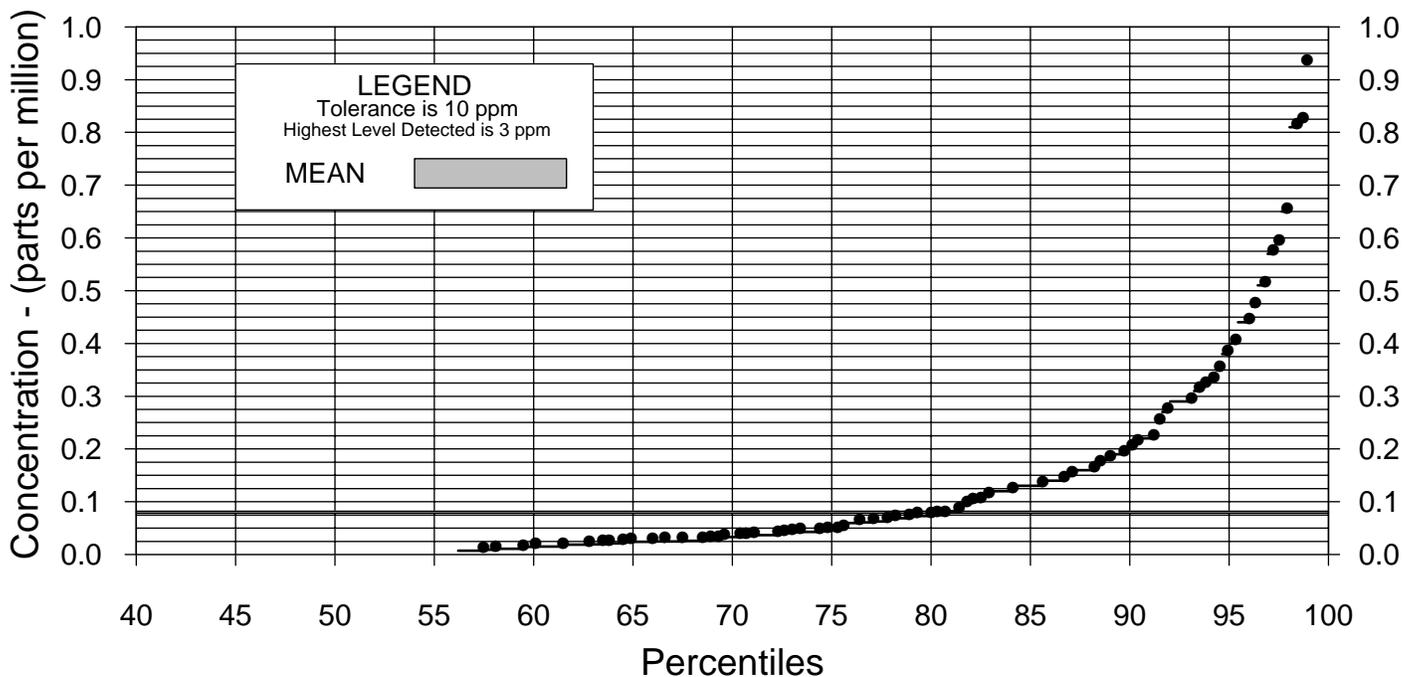
In Appendix K, the concentrations detected (in parts per million, except where otherwise noted) are plotted versus the calculated percentiles for the following eight pesticide/commodity pairs:

Carbaryl / Cherries
Myclobutanil / Cherries
Endosulfan sulfate / Cucumbers
Iprodione / Grapes
Methamidophos / Green Beans
Imazalil / Oranges
Phosmet / Peaches
Captan / Strawberries (Fresh)

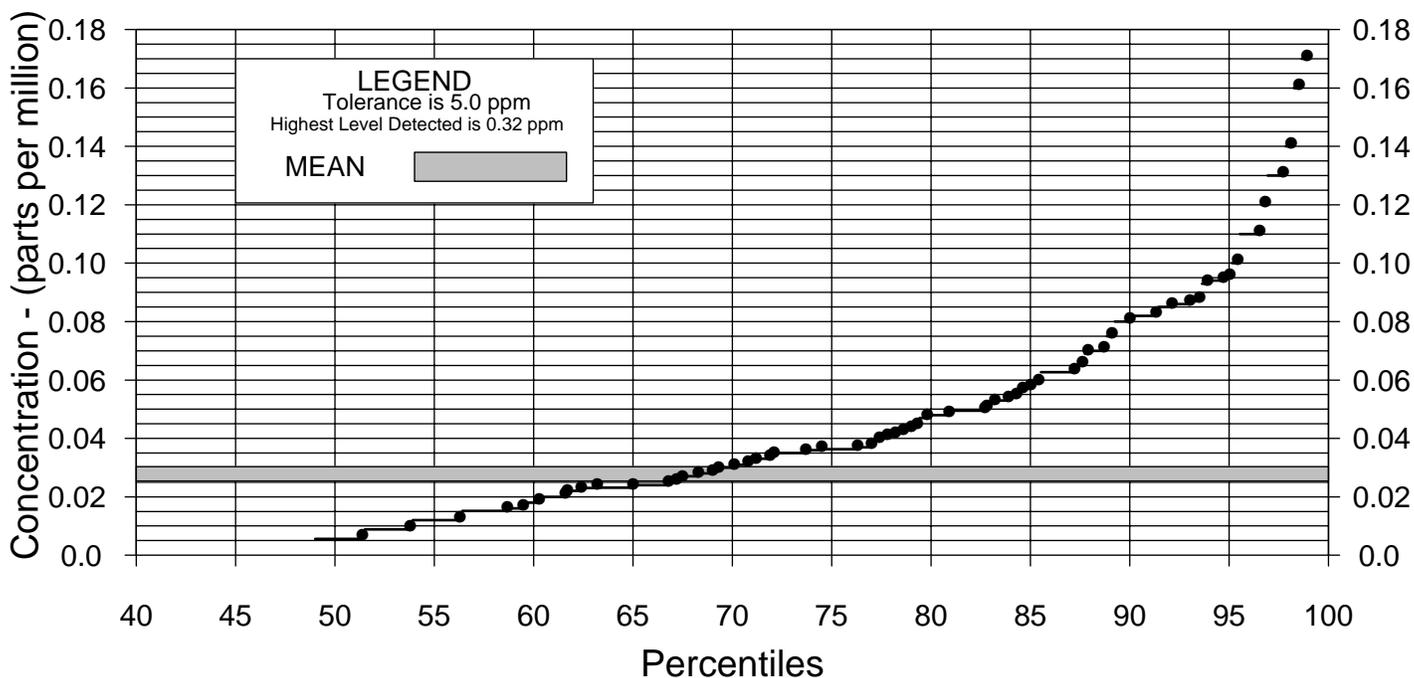
The distribution of residues for all of the PDP pesticide/commodity pairs has the same curved shape. The highest percentile graphed in the appendix is the 99th, which in each case is lower than the highest concentration detected in the sample (refer to the value shown in each graph's legend). Inclusion of the highest concentration would cause graph distortion, which would obscure concentrations in the low ranges. The tolerance for the pesticide/commodity pair is also indicated in the legend of each graph. The large dots show the percentage of the commodity at or below a given level of residue concentration. For example, an estimated 50 percent of oranges available to U.S. consumers in 2000 had imazalil residue concentrations of 0.015 ppm or less. The solid lines, trailing the large dots, depict percentage values. The lowest value of these solid lines indicates the estimated percentage of the commodity available to U.S. consumers with no detectable residues. For imazalil in oranges, this is 37 percent. The shaded bar denotes the range of values estimated for the mean. For imazalil/oranges, the mean range is approximately 0.042 - 0.048 ppm, corresponding to the 76th percentile.

Appendix K. Cumulative Distributions of Residues for Selected Pesticide/Commodity Pairs

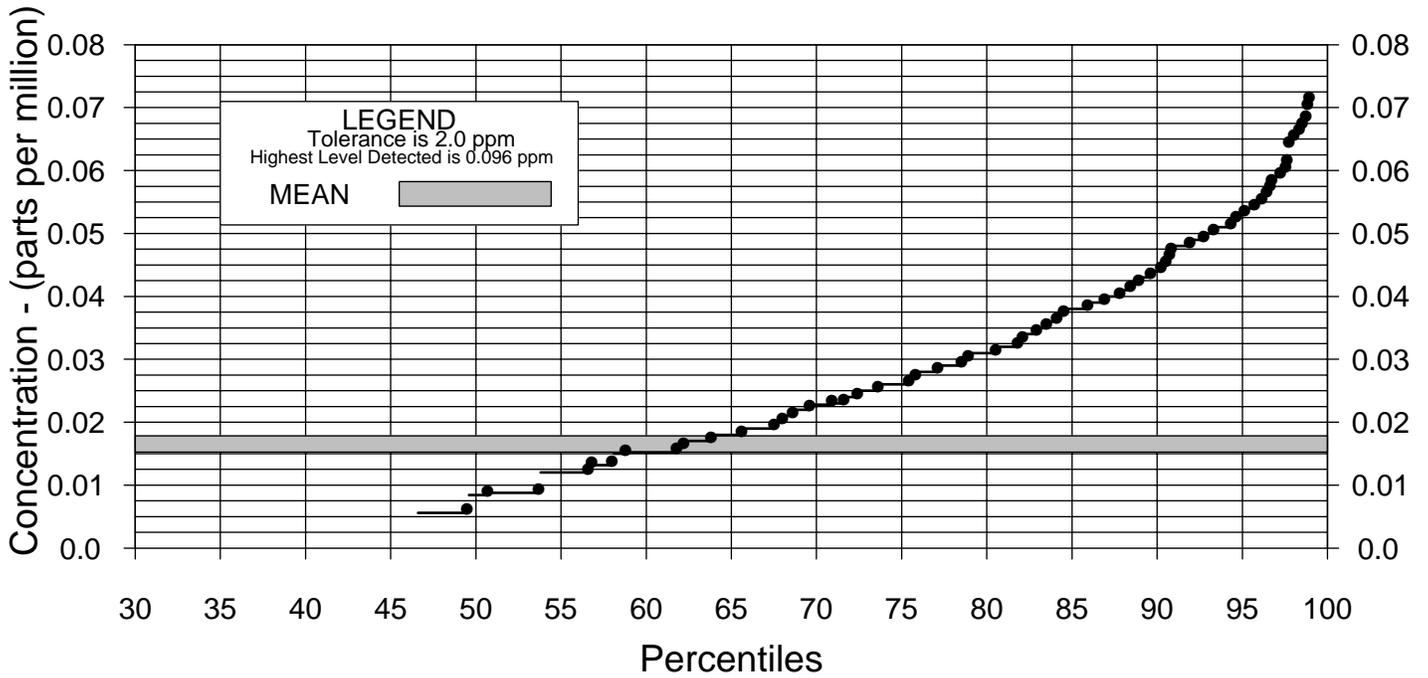
Carbaryl / Cherries



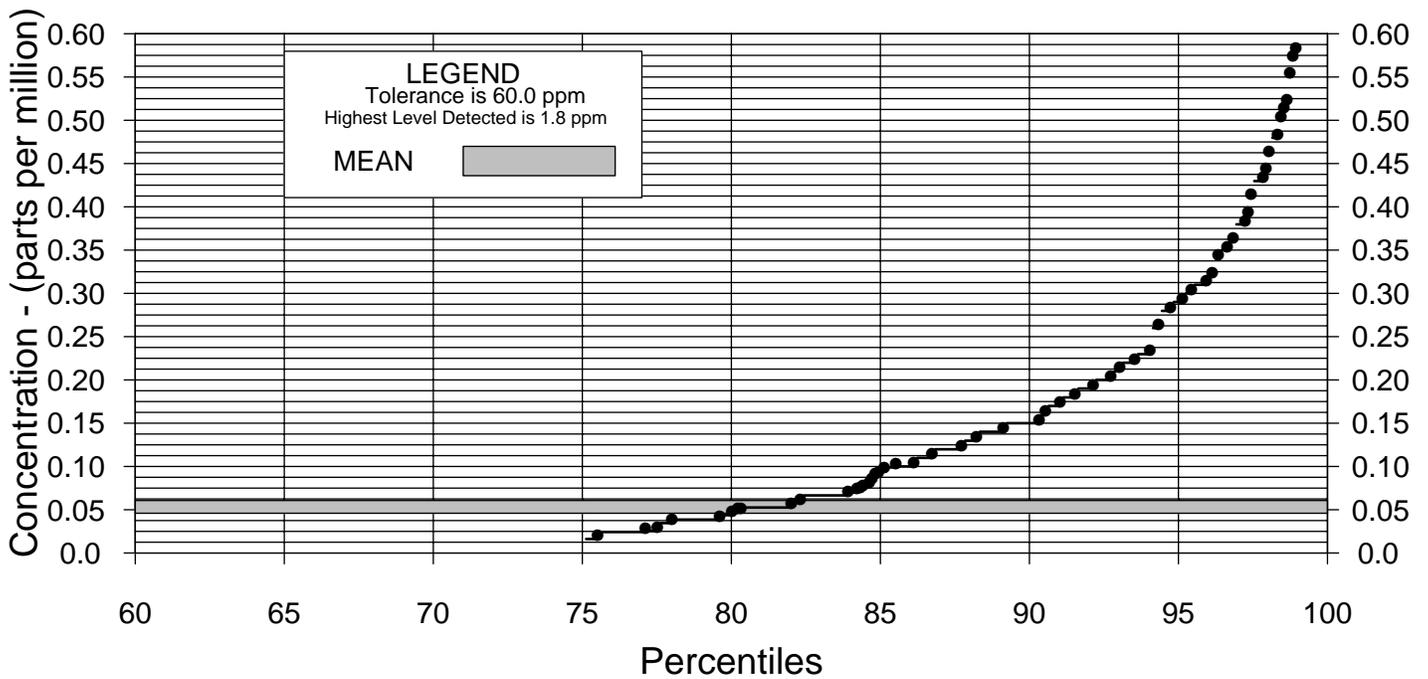
Myclobutanil / Cherries



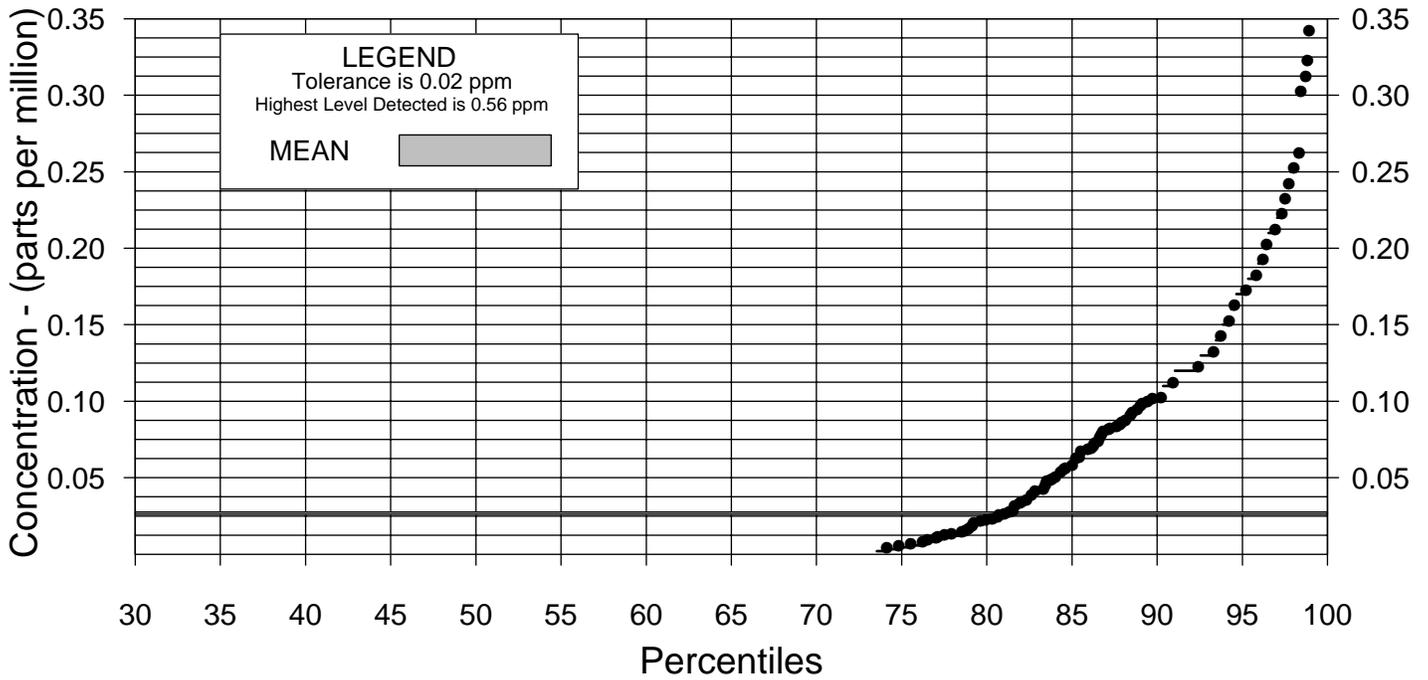
Endosulfan sulfate / Cucumbers



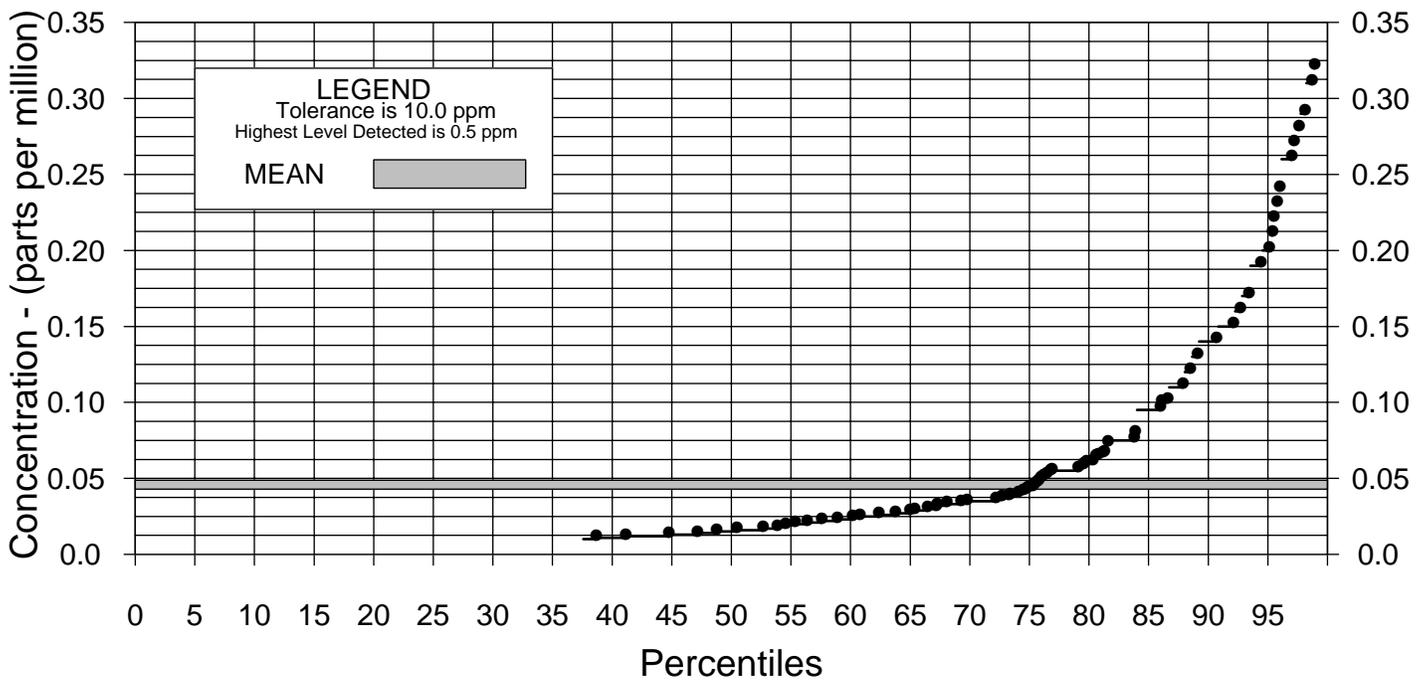
Iprodione / Grapes



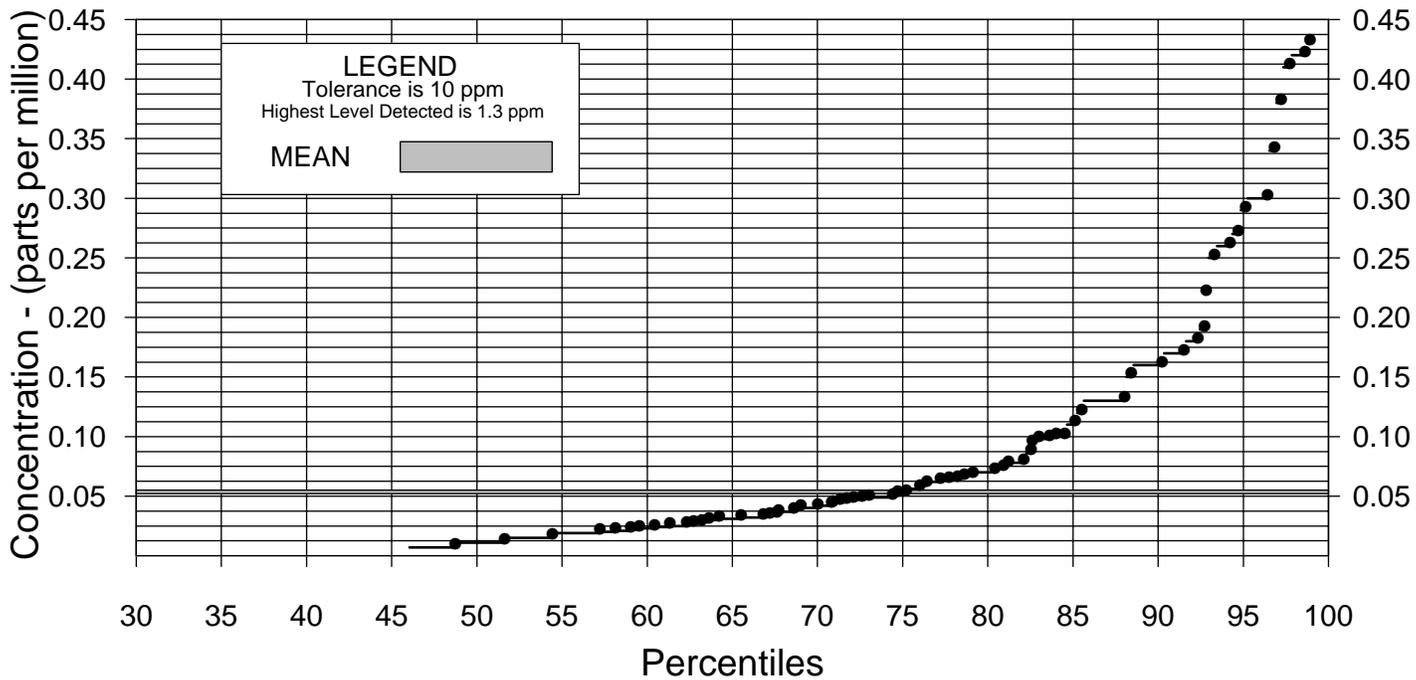
Methamidophos / Green Beans



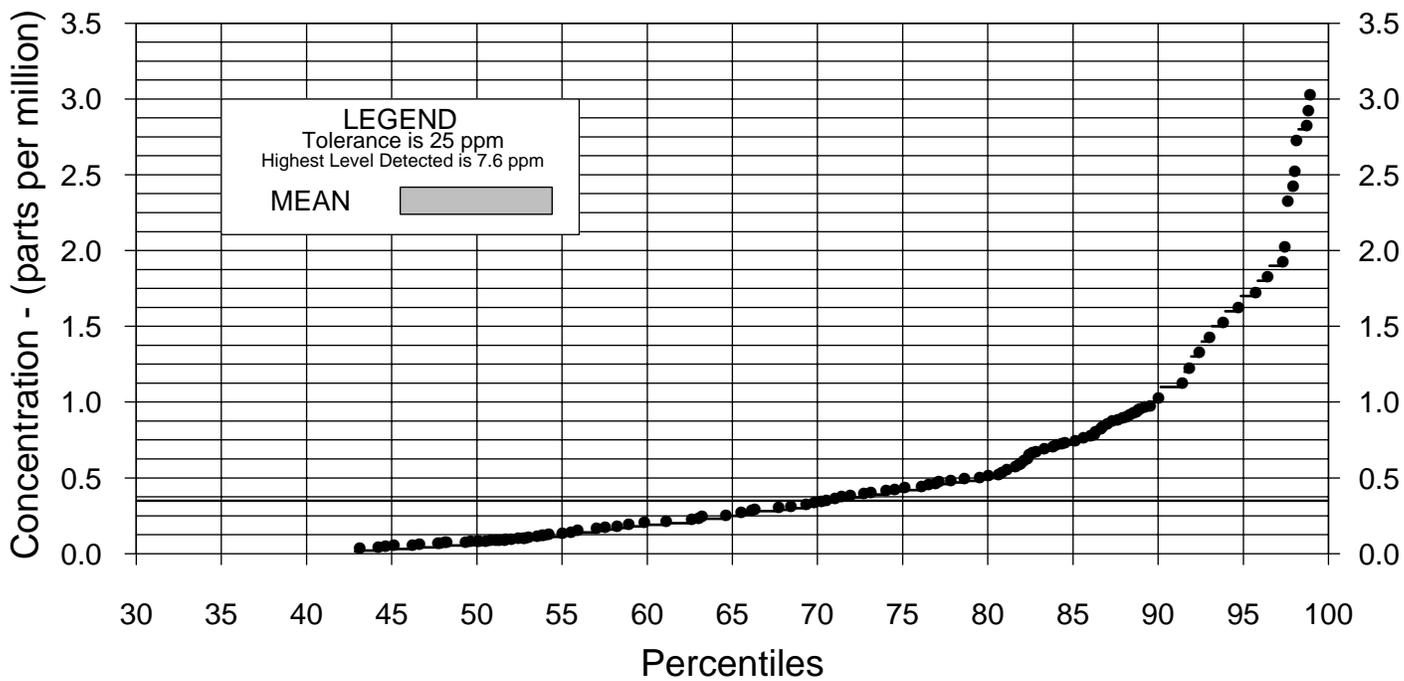
Imazilil / Oranges



Phosmet / Peaches



Captan / Strawberries (Fresh)

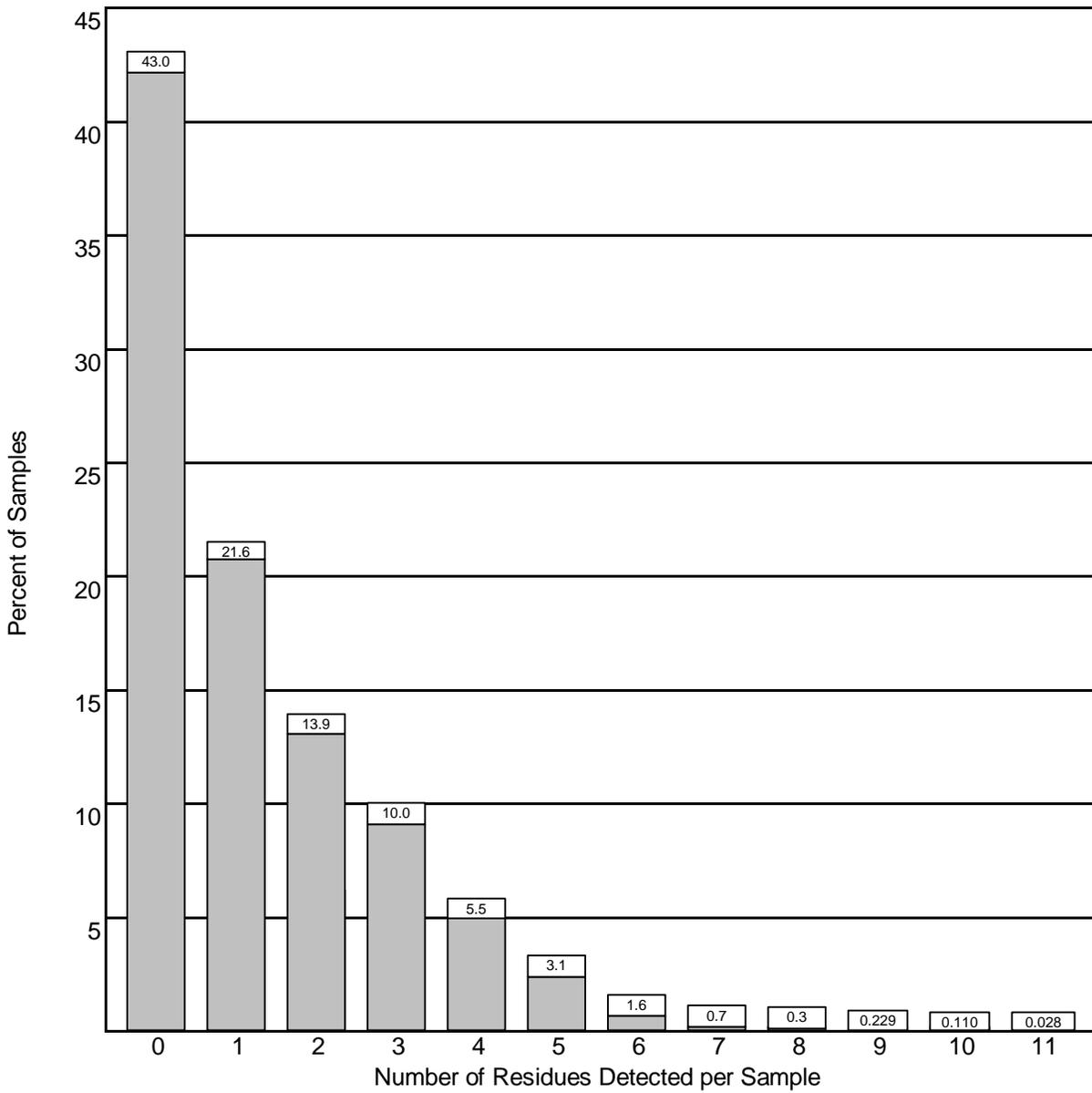


Appendix L

Number of Residues Detected per Sample (Fresh and Processed Products)

Appendix L shows the percentage of samples versus the number of residues detected per sample. Page 1 shows the overall number of samples and percentages (of total number of samples analyzed) for each detection group across all commodities. Page 2 shows the number of residues detected by individual commodity. For the 10,907 samples tested, 43.0 percent of the samples had no detectable residues, 21.6 percent had one residue, and 35.4 percent of the samples had more than one residue.

APPENDIX L. SAMPLES vs. NUMBER OF RESIDUES DETECTED PER SAMPLE



	Number of Residues Detected per Sample											
	0	1	2	3	4	5	6	7	8	9	10	11
Number of Samples	4692	2356	1511	1086	604	336	173	73	36	25	12	3
Percent of Total Samples	43.0	21.6	13.9	10.0	5.5	3.1	1.6	0.7	0.3	0.229	0.110	0.028

TOTAL NUMBER OF SAMPLES = 10,907

APPENDIX L. SAMPLES vs. NUMBER OF RESIDUES DETECTED PER SAMPLE

	Number of Residues Detected per Sample											
	0	1	2	3	4	5	6	7	8	9	10	11
Fresh Fruit and Vegetables:												
	Percent											
Apples (184)	21.2	29.3	28.3	9.8	8.2	2.2	1.1	--	--	--	--	--
Cantaloupe (410)	42.7	37.1	14.1	4.6	1.5	--	--	--	--	--	--	--
Carrots (184)	19.6	31.0	27.7	13.6	5.4	1.6	1.1	--	--	--	--	--
Cherries (275)	5.8	14.2	15.6	26.5	19.6	11.6	4.4	1.5	--	0.7	--	--
Cucumbers (737)	22.3	21.4	14.1	25.0	10.6	5.3	1.2	0.1	--	--	--	--
Grapes (741)	31.0	32.5	17.5	9.3	6.7	2.3	2.3	0.5	--	--	--	--
Green Beans (720)	31.1	19.6	18.3	16.7	6.3	4.9	2.4	0.8	--	--	--	--
Lettuce (740)	62.8	20.8	9.7	4.3	1.6	0.5	0.1	--	--	--	--	--
Nectarines (346)	2.0	12.1	28.6	24.9	15.6	9.0	4.6	2.9	0.3	--	--	--
Oranges (744)	20.3	56.5	21.5	1.7	--	--	--	--	--	--	--	--
Peaches, Composite (536)	6.0	10.1	17.7	20.7	18.5	11.4	6.9	4.5	2.6	1.1	0.6	--
Peaches, Single Serving (534)	6.7	11.8	18.9	21.5	17.2	11.8	6.0	2.2	2.1	1.3	0.4	--
Pineapples (364)	94.5	4.7	0.8	--	--	--	--	--	--	--	--	--
Potatoes (369)	30.1	58.3	9.5	1.9	0.3	--	--	--	--	--	--	--
Strawberries (518)	9.1	25.1	33.0	22.6	7.5	1.9	0.6	0.2	--	--	--	--
Sweet Bell Peppers (738)	29.9	17.6	20.3	10.8	5.6	4.7	5.0	1.9	1.4	1.4	0.9	0.4
Processed Fruit and Vegetables:												
Pears, Canned (366)	93.4	6.6	--	--	--	--	--	--	--	--	--	--
Strawberries, Frozen (37)	18.9	8.1	21.6	21.6	18.9	5.4	2.7	2.7	--	--	--	--
Tomatoes, Canned (369)	89.2	10.0	0.8	--	--	--	--	--	--	--	--	--
Number of Samples	2976	2131	1467	1077	603	336	173	73	36	25	12	3
Percent of Total Samples	33.4	23.9	16.5	12.1	6.8	3.8	1.9	0.8	0.4	0.281	0.135	0.034
TOTAL NUMBER OF FRUIT & VEGETABLE SAMPLES = 8,912												
Processed Nut Product:												
Peanut Butter (716)	74.0	20.5	4.1	1.3	0.1	--	--	--	--	--	--	--
Number of Samples	530	147	29	9	1	--	--	--	--	--	--	--
Processed Grain Product:												
Rice (178)	67.4	27.0	5.6	--	--	--	--	--	--	--	--	--
Number of Samples	120	48	10	--	--	--	--	--	--	--	--	--
Poultry Product:												
Adipose (476)	93.9	5.0	1.1	--	--	--	--	--	--	--	--	--
Liver (480)	99.2	0.8	--	--	--	--	--	--	--	--	--	--
Muscle (145)	98.6	1.4	--	--	--	--	--	--	--	--	--	--
Number of Samples	1066	30	5	--	--	--	--	--	--	--	--	--
Percent of Total Samples	96.8	2.7	0.5	--	--	--	--	--	--	--	--	--
TOTAL NUMBER OF POULTRY SAMPLES = 1,101												

Appendix M

Fruit and Vegetable Samples Reported to FDA as Exceeding the Tolerance or Without Established Tolerance

(per Code of Federal Regulations , Title 40, Part 180)

Appendix M shows residues reported to FDA as exceeding the tolerance or residues for which no established tolerance was listed under the Code of Federal Regulations (CFR), Title 40, Part 180. In 2000, a total of 153 samples with 166 residues were reported to the FDA as Presumptive Tolerance Violations.

A total of 18 fruit and vegetable samples and 1 poultry sample were found to have residues at levels exceeding the established tolerance. Samples containing a residue exceeding an establish tolerance included;

- ? 8 green bean samples
- ? 4 strawberry samples
- ? 3 peach samples
- ? 2 cucumber samples
- ? 1 sweet bell pepper sample
- ? 1 poultry adipose sample

In addition, 126 fruit and vegetable samples and 8 poultry samples were found to have 147 residues for which no tolerance was established.

- ? 123 samples contained 1 residue for which no tolerance was established
- ? 9 samples contained 2 residues for which no tolerance was established
- ? 2 samples contained 3 residues for which no tolerance was established

Appendix M also notes if metabolites (or isomers) were detected as part of the same sample. In instances where both parent and metabolite (or isomer) were detected, PDP accounted for both as part of the same tolerance expression.

**APPENDIX M. SAMPLES REPORTED TO FDA AS EXCEEDING THE TOLERANCE
OR WITHOUT ESTABLISHED TOLERANCE
(per Code of Federal Regulations, Title 40, Part 180)**

Residues Exceeding Established Tolerance

Commodity / Pesticide	Limit of Detection, ppm	Concentration Detected, ppm	EPA Tolerance Level, ppm
1 Cucumbers / Acephate	0.006	0.079	0.02
2 Cucumbers / Acephate	0.002	0.059	0.02
3 Green Beans / Esfenvalerate	0.038	0.063	0.05
4 Green Beans / Methamidophos	0.001	0.13	0.02
5 Green Beans / Methamidophos	0.001	0.13	0.02
6 Green Beans / Methamidophos	0.002	0.099	0.02
7 Green Beans / Methamidophos	0.002	0.20	0.02
8 Green Beans / Methamidophos	0.002	0.22	0.02
9 Green Beans / Methamidophos	0.002	0.099	0.02
10 Green Beans / Methamidophos	0.001	0.039	0.02
11 Peaches, Composite / Acephate	0.004	0.026	0.02
12 Peaches, Composite / Methamidophos	0.003	0.044	0.02
13 Peaches, Composite / Methamidophos	0.003	0.042	0.02
14 Poultry, Adipose / Acephate	6.9 (ppb)	112.1 (ppb)	100 (ppb)
15 Strawberries, Fresh / Methamidophos	0.015	0.12	0.02
16 Strawberries, Fresh / Methomyl	0.017	3.0	2.0
17 Strawberries, Fresh / Methomyl	0.012	2.5	2.0
18 Strawberries, Fresh / Myclobutanil	0.083	0.56	0.5
19 Sweet Bell Peppers / Benomyl	0.050	0.25	0.2

**Distribution of Residues with No Tolerance Listed in 40 CFR, Part 180, by Commodity/Pesticide
(Includes Samples of Unknown Origin - Regional Tolerances May or May Not Apply)**

Commodity / Pesticide	Samples Screened	Samples Reported	% of Samples	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm
1 Apples						
Dicloran	184	2	1.1	0.005 ^	0.003 ^	NT
2 Carrots						
Phosmet	184	6	3.3	0.002 - 0.013	0.001 - 0.005	NT
Terbufos sulfone	184	1	0.5	0.008 ^	0.001 - 0.004	NT
3 Cherries						
Methoxychlor olefin	199	1	0.5	0.002 ^	0.001 ^	NT
Propargite	275	1	0.4	0.083 ^	0.020 - 0.050	NT
4 Cucumbers						
Chlorpropham	737	1	0.1	0.042 ^	0.010 - 0.025	NT
Dimethoate	737	7	0.9	0.003 - 0.30	0.002 - 0.005	NT
Omethoate ¹	737	5	0.7	0.013 - 0.060	0.004 - 0.009	NT
Iprodione	737	2	0.3	0.035 - 0.14	0.021 - 0.024	NT
Methiocarb	540	1	0.2	0.072 ^	0.016 - 0.043	NT
Quintozene-PCNB	737	13	1.8	0.002 - 0.030	0.001 - 0.003	NT

Commodity / Pesticide	Samples Screened	Samples Reported	% of Samples	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm
5 Grapes						
Diphenylamine-DPA	142	1	0.7	0.017 ^	0.010 ^	NT
Malathion oxygen analog	741	1	0.1	0.005 ^	0.003 - 0.028	NT
Procymidone	741	2	0.3	0.053 - 0.054	0.014 - 0.015	NT
Vinclozolin	741	1	0.1	0.11 ^	0.009 - 0.010	NT
6 Green Beans						
o-Phenylphenol	276	1	0.4	0.007 ^	0.004 - 0.010	NT
Oxamyl	719	1	0.1	0.035 ^	0.005 - 0.018	NT
Propargite	720	2	0.3	0.012 ^	0.007 - 0.020	NT
7 Lettuce						
Chlorothalonil	740	2	0.3	0.008 - 0.012	0.005 - 0.007	NT
8 Nectarines						
Chlorpropham	96	1	1	0.017 ^	0.010 ^	NT
Thiabendazole	96	1	1	0.050 ^	0.030 ^	NT
9 Peaches, Composite						
Chlorpropham	536	3	0.6	0.020 - 0.11	0.006 ^	NT
Dimethoate	536	2	0.4	0.005 ^	0.003 ^	NT
Diphenylamine-DPA	536	15	2.8	0.025 - 0.26	0.015 ^	NT
Imazalil	527	4	0.8	0.017 - 0.044	0.010 ^	NT
Pirimicarb	536	1	0.2	0.033 ^	0.020 ^	NT
Propargite	536	10	1.9	0.083 - 0.44	0.050 ^	NT
Thiabendazole	536	7	1.3	0.05 - 0.12	0.030 ^	NT
Triadimefon	536	1	0.2	0.020 ^	0.012 ^	NT
10 Potatoes						
o-Phenylphenol	369	1	0.3	0.013 ^	0.008 - 0.010	NT
11 Poultry, Adipose						
Diazinon	476	2	0.4	36.1 - 45.4 (ppb)	9.4 ^ (ppb)	NT
Ethion mono oxon	476	1	0.2	7.2 ^ (ppb)	5.4 ^ (ppb)	NT
Phosmet	476	1	0.2	80.7 ^ (ppb)	9.0 ^ (ppb)	NT
12 Poultry, Liver						
Aldicarb sulfone	480	1	0.2	4.3 ^ (ppb)	2.0 - 2.2 (ppb)	NT
Diazinon	479	1	0.2	11.7 ^ (ppb)	9.4 ^ (ppb)	NT
Methiocarb	480	2	0.4	5.9 - 11.9 (ppb)	3.8 - 4.0 (ppb)	NT
13 Poultry, Muscle						
Diazinon	145	1	0.7	19.4 ^ (ppb)	9.4 ^ (ppb)	NT
14 Strawberries, Fresh						
Anilazine	387	5	1.3	0.14 - 0.26	0.083 ^	NT
Dimethoate	518	1	0.2	0.003 ^	0.002 - 0.010	NT
Malathion oxygen analog	131	5	3.8	0.005 - 0.013	0.003 - 0.008	NT
Piperonyl butoxide	518	2	0.4	0.083 - 0.79	0.010 - 0.050	NT
Propargite	518	2	0.4	0.054 - 0.11	0.020 - 0.050	NT

Commodity / Pesticide	Samples Screened	Samples Reported	% of Samples	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm
15 Sweet Bell Peppers						
Chlorothalonil	539	2	0.4	0.008 - 0.089	0.005 - 0.020	NT
Chlorpropham	738	6	0.8	0.017 - 0.052	0.010 - 0.020	NT
Dicloran	738	1	0.1	0.013 ^	0.008 ^	NT
Diphenylamine-DPA	738	1	0.1	0.017 ^	0.008 - 0.010	NT
Ethion	738	4	0.5	0.003 - 0.021	0.002 ^	NT
Ethoprop	738	4	0.5	0.002 - 0.024	0.001 - 0.002	NT
Folpet	738	1	0.1	0.035 ^	0.019 - 0.021	NT
Iprodione	738	4	0.5	0.020 - 0.064	0.012 - 0.031	NT
Metribuzin	18	1	5.6	0.050 ^	0.030 ^	NT
Piperonyl butoxide	694	2	0.3	0.022 - 0.058	0.010 - 0.013	NT

KEY

^ The same concentration was reported for all detections or LODs.

NT No tolerance level was set for that pesticide/commodity pair.

¹ Five detections within the same samples as Dimethoate.

Note:

For those pesticide/commodity pairs where the minimum detected value is less than the limit of quantitation (3 times the limit of detection), the reported values are estimates. In a few cases, this may apply to the maximum detected value.

PESTICIDE DATA PROGRAM

Annual Summary Calendar Year 2000

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